

1984

Supplementary Materials on Drug Education

Vickie Ellen Clay

Eastern Illinois University

This research is a product of the graduate program in [Educational Psychology and Guidance](#) at Eastern Illinois University. [Find out more](#) about the program.

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SUPPLEMENTARY MATERIALS

ON
DRUG EDUCATION
(TITLE)

BY

VICKIE ELLEN CLAY

B.S., Eastern Illinois University, 1972

M.S., Eastern Illinois University, 1976

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

SPECIALIST IN EDUCATION

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

1984
YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING
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SUPPLEMENTARY MATERIALS

CN

DRUG EDUCATION

BY

VICKIE ELLEN CLAY

B.S., Eastern Illinois University, 1972

M.S., Eastern Illinois University, 1976

ABSTRACT OF A FIELD STUDY

Submitted in partial fulfillment of the requirements
for the degree of Specialist in Education at the
Graduate School of Eastern Illinois University

CHARLESTON, ILLINOIS

1984

Statement of Problem:

The problem of this paper was to develop supplementary drug materials to be used with the health textbook at Potomac High School. The information provided in the current health textbook is not thorough enough to provide adequate information in some areas of drug pharmacology. The supplementary materials are designed to not only provide factual information but also to encourage attitudinal changes in the students through the use of various activities.

Procedure:

Four steps have been taken in order to solve the problem of developing supplementary drug materials for the Potomac High School health education class. A review of the periodical literature for articles pertaining to drugs was conducted. A search for pharmacological information and statistics of drug use was conducted for inclusion in the supplementary materials.

The second step was a review of journal articles for research studies relating to drug education programs. The articles were studied in order to determine which aspects of drug education programs researchers appraised as successful.

Having obtained the above information, a perusal of the drug related and health textbooks was done. This information was primarily incorporated into the supplementary materials.

The fourth and final step was an examination of some of the current and past drug education programs. These programs

were studied in an attempt to determine which methods and exercises would prove more effective in producing positive student attitude changes.

Conclusions:

Two principal conclusions have been drawn from the experience of having compiled drug information for the supplementary materials.

1. Although searching for and then selecting the most relevant drug information was time consuming, it was also rewarding.

2. After reading about the various drug education programs, it was interesting to note that one particular program would not be effective for every school. However, each program contained similar aspects. For instance, most of the programs used some form of counseling whether it be individual or group. Also, the counselor was usually on staff, but sometimes employed from outside the educational field.

Recommendations:

After the supplementary materials have been used for a year, the first two recommendations should be followed to retain the effectiveness of the information. The remaining recommendations would be more beneficial if they could be implemented some time during the coming or the next school year.

1. Each year the supplementary materials should be evaluated for effectiveness. This could be done by means of tests on the materials, questions asked by students pertaining to the materials and the frequency of drug abuse incidents in the school.

2. The materials should be up-dated each year in order to add new information or replace new information with that which has become outdated.

3. Teacher in-service workshops should be held in order to learn about the latest drug trends, new drugs on the market and counseling techniques. These are very important aspects to beginning and maintaining a successful drug education program.

4. Drug education should be integrated into other areas of education not be dealt with solely by the health teacher. Other teachers could deal with student values clarification, communication skills, developing self-esteem and/or nutrition.

5. Outside sources should be implemented into the program. For example, a lawyer, police officer, nurse or a drug counselor (to name a few) could add further insight into the drug problem.

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CHAPTER I

INTRODUCTION

BACKGROUND

Drug abuse has been a concern for the nation for a number of years. In 1970, a movement began in order to develop drug education programs in the public schools. This was prompted by Richard Nixon, the President of the United States, who

asserted that drug abuse education, as a preventative measure of the highest national priority, must reach all publicly educated children from kindergarten through the twelfth grade.¹

After this, drug education programs were developed throughout the nation.

However, drug education programs, for the most part, have not proven to be highly successful. Unfortunately, in some instances the programs might have "actually stimulated interest in such substances."²

Various explanations have been given for the failure of so many programs. "Many programs suffer from ill-defined needs or problems, poorly conceived programs, and poorly trained teachers."³ Others feel that too much emphasis has been given to cognitive rather than affective learning. They feel students need to be given information concerning drugs but the program should be directed toward an attitude change.

It is important to remember when looking at a drug education program that there are a number of variables to be considered in determining its success. Some variables would be the attitudes of the students in the program, attitudes of the community, and the credibility of the teacher.

STATEMENT OF PROBLEM

The problem of this paper was to develop supplementary drug materials to be used with the health textbook at Potomac High School. The information provided in the current health textbook is not thorough enough to provide adequate information in some areas of drug pharmacology. The supplementary materials are designed to not only provide factual information but also to encourage attitudinal changes in the students through the use of various activities.

PROCEDURE

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DEFINITIONS

To insure a more thorough understanding, the following terms are defined.

Drug: Is any substance that when ingested, changes the functioning of the body or mind of the human organism. Basically, a drug is used to treat illness, to protect against disease, to alter moods and behavior, to promote better health. Drugs are not only controlled substances (such as heroin) but socially accepted drugs (such as tobacco and coffee) over-the-counter medications, prescription drugs.

Drug Education: Purposeful learning which attempts to encourage and help the individual to make more intelligent use of drugs, and to refrain₅ from or reduce the misuse and abuse of drugs.

Drug Use: Deliberate exposure to a drug substance, generally₆ in a continuing and non-experimental manner.

Drug Misuse: Use of a drug substance contrary to the instructions of₇ the supplier, the dispenser, or the prescriber.

Drug Abuse: Use of a drug substance to the detriment of either the user or society.₈

ENDNOTES

¹David J. Hanson, "The Effectiveness of Alcohol and Drug Education," Journal of Alcohol and Drug Education, Vol. 27, no. 2, (Winter, 1982), p. 1.

²Ibid., p. 1.

³Stuart W. Fors, Ed.D., and Dean G. Rojek, Ph.D., "The Social and Demographic Correlates of Adolescent Drug Use Patterns," Journal of Drug Education, Vol. 13, no. 3, (1983), p. 205.

⁴Health Education Department, Here's Looking at You Two, (Seattle, WA, Comprehensive Health Education Foundation, 1982), (Yellow pages section), p. 7.

⁵Ibid., p. 7.

⁶Ibid., p. 7.

⁷Ibid., p. 7.

⁸Ibid., p. 7.

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CHAPTER II

REVIEW OF RELATED LITERATURE

RELATED LITERATURE

There is a need for effective drug education programs in the school systems. This is apparent in the 1980 study conducted by Johnston and Bachman. They surveyed 15,900 high school seniors in 127 high schools across the country. It was discovered that during the year,

88 percent of the seniors had used alcohol and 49 percent had used marijuana or hashish. Of that group 9 percent reported using marijuana daily, and 6 percent reported using alcohol daily. In addition, 4 out of 10 seniors reported using illicit drugs other than marijuana at some time during that year.

Of course, schools have been trying to deal with the problem of drug abuse through various types of drug education programs. Unfortunately, many have achieved little success. Researchers are not in agreement why these programs fail. However, some programs have shown success.

There are two primary differences between successful and non-successful drug education programs. The first major difference appears to be that too often too much emphasis is placed on the cognitive rather than the affective domain of learning. Many programs dwell on the cognitive domain presenting only pharmacological information. More emphasis must be given to the affective domain in order to bring about a positive change in students thinking.

The second difference appears to be the credibility of the program and the person presenting it. Persons dealing with drug education programs must be well-trained in the area of drug. Far too often this is not the case. Whenever credibility is not firmly established, students will usually disregard what they are told.

The program at Swarthmore High School in Pennsylvania is a good example of a successful drug education program. Because of the exceptionally high number of students abusing drugs, the principal at Swarthmore invited "the Delaware County Alcohol and Addictions Council to use his school for a pilot prevention program called CAPS--Chemical Addictions Prevention in Schools."²

An outside, trained counselor was employed to run the program for the first year. The counselor was accepted more readily by the students because of her outside status and the fact that what was discussed was confidential.

Students work with the counselor in groups in an attempt to work out their problems. Heavy drug users, under the new school policy, along with their parents, "must agree to some sort of counseling or treatment before the student may return to school."³

School board members, administrators, and teachers are convinced the program has developed healthier attitudes among students. Besides seeing less student drug and alcohol use, Principal Sandberg reports a more positive atmosphere in Swarthmore High, with students showing less cliquishness than before and a more mature understanding of one another.

Some schools have taken an even firmer approach--a "get tough" attitude. One such approach is the drug education program in Xenia, Ohio. Students in the high school must conform to strict rules, such as:

Students found to be under the influence of drugs or alcohol at school will not be tolerated. On the first offense, the student will be suspended from school for at least ten days and recommended for expulsion. The student may be permitted to return to school after ten days if--and only if--the student and parents agree to participate in a community treatment program. The local juvenile justice court will intercede against any student or family that does not comply. In addition, the student may not take part in any extracurricular activities for at least one season.

Punishment for the second--and each subsequent--offense must be even stronger. For example: 'The student will be expelled from school for the rest of the semester, with loss of credit for the semester. Both student and parents must participate in a treatment program. Those who fail to comply will come under court order to do so.'

Although Xenia has found considerable success in their program, it does have its drawbacks. Before implementing a program such as Xenia's, firm support must be built not only within the school but also within the community.

Corpus Christi High School in Texas has a similar "get tough" program. They too have experienced success.

Results after the first full semester: Fifty-one students were suspended (88 percent of these were boys caught with marijuana), compared with ten students given semester suspensions for drug and alcohol violations in the entire previous school year.

In the early 70's, Fairfield County, Connecticut realized they had a drug problem in their schools, so they started a Family Life Education Program. Robert Duth, an administrator, describes:

This program, which runs from kindergarten through the twelfth grade, teaches children about a range of personal topics, including sex education and drug use. 'We deal with drug use by students on a case-by-case basis,' Duth says, 'but when we suspend kids for drug use, we turn their names over to the police.'

Another program developed by the El Toro High School in Southern Orange County in California, has proven very successful. This program, called Awareness '82, was implemented in the 1979-80 school year.

"Voluntary attendance seminars were the heart of the program."⁸ Seminars were held not only for students but also for parents.

A group of volunteer teachers was trained to lead student and parent seminars. . . Also, a staff development program was organized to gain schoolwide staff support,⁹ further encouraged by all-school assemblies.

The program at El Toro High School has proven successful.

At the end of the 1980-81 school year, evaluations indicated that attitudes on campus regarding drugs and alcohol were changing. Students began to approach counselors, administrators and teachers asking for¹⁰ help to handle drug/alcohol related problems.

The programs cited are indicative of the success which has been accomplished in the area of drug education. Not all of the programs approach the problem in the same manner, however, the approaches used have proven successful for their school systems.

ENDNOTES

¹John Chambers and Ellen R. Morehouse, "A Cooperative Model for Preventing Alcohol and Drug Abuse," NASSP Bulletin, Vol. 67, (January, 1983), pp. 81-82.

²Ruth Seegrist, "This Program Helps Kids Say No to Alcohol and Drugs," The American School Board Journal, Vol. 169, (September, 1982), p. 28.

³Ibid., p. 29.

⁴Ibid., p. 41.

⁵Gerald Strong, "It's Time to Get Tough on Alcohol and Drug Abuse in Schools," The American School Board Journal, (February, 1983), p. 24.

⁶Dean Banks, "But, Be Warned: A Get-Tough Policy Can Be Touchy, Too," The American School Board Journal, (February, 1983), p. 25.

⁷Jerome Cramer, "Student Drug Use Might Be Changing, But the Crisis for Schools Is Far from Over," The American School Board Journal, (February, 1983), p. 26.

⁸"Against Drug and Alcohol Abuse: Awareness '82," Thrust, Vol. 11, no. 5, (May/June, 1982), p. 30.

⁹Ibid., p. 32.

¹⁰Ibid., p. 32.

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CHAPTER III
SUPPLEMENTARY MATERIALS

INTRODUCTION

Drugs. What are they? Are they pills and powders sold by a pusher? allergy medicines? alcoholic drinks/ "A drug is a substance that when put into your body can change the way your body works. Of course, nearly everything you put into your body changes it somehow."¹

Drugs have been used throughout the centuries, but not until the last few years have the ill-effects of misused and abused drugs been as prevalent as they are now.

There are two categories of drugs, licit and illicit. A licit drug is legal and considered necessary for "preventing or curing disease or otherwise enhancing physical and/or mental welfare."² Illicit drug use is:

- ...using a drug that is not legal
- ...using a drug that is being used for a purpose it has not been made for
- ...using a product or substance not intended to be a drug but used in some way to produce a drug-like state³

These categories can be further explained as follows:

Drug use: use for the intended purpose of the manufacturer or prescribing physician. Moderate use of socially accepted drugs, such as caffeine, can also be considered in the realm of normal drug use.

Drug misuse: use of a legally prescribed drug in a manner not in accord with the prescribed use, or use of another person's prescription drug; usually without a desire for the euphoric effects involved.

Drug abuse: the repeated self-administration of a drug (usually illegally obtained) with a desire for the euphoric effects of the drug. Chronic abuse leads to socially deviant behavior and often leads to psychological and/or physiological dependence.

Drug Classifications

Drugs can be classified by a variety of systems. They can be separated in different broad categories using legal, medical, drug action, and some social systems. Some overlap does occur among these systems and as a result, there can be some confusion as to what is meant by a certain classification of drugs.

Legal Classifications

This system is used by the American legal and enforcement structure to regulate the use of dangerous drugs. According to the Controlled Substance Act, five schedules are established for controlled substances and most dangerous drugs are placed in one of those five classifications...Alcohol, reported to be the most used and abused drug in the U. S. is not listed on this schedule system so it has some limitations. A description of the five schedules follows:

Schedule I substances. Drugs in this schedule are those that have no accepted medical use in the United States and have a high abuse potential. Some examples are heroin, marijuana, LSD, peyote, mescaline, psilocybin, the tetrahydrocannabinols, morphine methylsulfonate, nicocodeine, and nicomorphine.

Schedule II substances. The drugs in this schedule have a high abuse potential with severe psychic or physical dependence liability. Schedule II controlled substances consist of certain narcotic drugs and drugs containing amphetamines or methamphetamines as the single active ingredient or in combination with each other. Examples of Schedule II controlled substances are: opium, morphine, codeine, methadone, pentopon, meperidine, cocaine, amobarbital, pentobarbital, secobarbital and methaqualone.

Schedule III substances. The drugs in this schedule have an abuse potential less than those in Schedules I and II and include compounds containing limited quantities of certain narcotic drugs and nonnarcotic drugs, such as: derivatives of barbituric acid, except those that are listed in another schedule, methyprylon, chlorhexadol, phencyclidine, nalorphine, benzphetamine, and phendimetrazine. Paregoric is in the schedule as well.

Schedule IV substances. The drugs in this schedule have an abuse potential less than those listed in Schedule III and include such drugs as: barbital, phenobarbital, methylphenobarbital, chloral hydrate, meproamate, and phentermine.

Schedule V substances. The drugs in this schedule have an abuse potential less than those listed in Schedule IV and consist of preparations containing moderate, limited quantities of certain narcotic drugs, generally for anticough and antidiarrheal purposes, which may be distributed without a prescription order.

Medical Classifications

Physicians, dentists, nurses, pharmacists and other medical professionals rely upon another classification system. Drugs are grouped according to the action of the drug upon organic tissue. Under this system, there are analgesics, anesthetics, diuretics, antibiotics, antihistamines, vaccinations, antipyretics, anti-inflammatory agents, anticoagulants, antidepressants, and so on. This system is combined with another system, the drug action system, to fill some of the gaps, such as the stimulant drugs category.

Social Classifications

Drugs can also be grouped by their source. Accordingly, there are prescription drugs, over-the-counter drugs, non-drugs (also called socially accepted drugs), illicit drugs and alternative drugs. The latter category refers to home remedies used as a substitute for a medication. An example would be milk or baking soda as an antacid. Other items considered as drugs by some professionals are poisons and food additives. Additional methods of classification in the social category are the routes of ingestion and the area of the body most affected by the drug. Also, some people refer to drugs by the disease it is intended to control, such as arthritic and cancer drugs.

Drug Action Classification

The most widely accepted method is the drug action system. By it, drugs are classified according to the action produced upon an organism's nervous system. There are five (and sometimes six) categories which are briefly described as follows:

Stimulants

They increase functional activity. These stimulants include amphetamines, amphetamine-like drugs, or equivalents, as well as the so-called minor stimulants, such as the socially accepted drugs nicotine and caffeine. Cocaine, a drug which

is both a stimulant and an analgesic, is generally considered as a stimulant drug. Another stimulant, ritalin, when administered to hyperactive children, produces a paradoxical result; it slows down activity like a depressant. Often stimulant drugs are used for weight control because they decrease one's appetite.

Depressants

They decrease or slow down functional activity. Sometimes referred to as sedatives or sedative hypnotics, depressants include babilurates and inhalants (volatile inhalants). They act on the nervous system to reduce anxiety and muscle tension. If taken in large volumes, they can produce sleep. Sedative hypnotics are the most prescribed drugs in the U. S.

Hallucinogens

They cause some degrees of distortion of reality by altering one's perception. Some professionals refer to this category as psychedelics. Included are LSD, mescaline, psilocybin, STP, DMT, and numerous others. Hallucinogens intensify emotional reactivity (with rapid swings and great ability) create a realtive sense of timelessness bordering on eternity, and can shift thinking to a deep, symbolic integrative level resembling dream states. Marijuana falls into this category according to the pharmacological properties, although it is listed as a narcotic by law.

Narcotics

They are usually products of the opium poppy that sedate and suppress pain as well as reduce activity. Examples are heroin, morphine and codeine. Some synthetic narcotics are meperidine (Demeral) oxycodone (Percodan), and methadone.

Tranquilizers

They are psychotherapeutic agents used in psychiatric medicine. Basically, they are muscular relaxants which relieve anxiety and excitability. Tranquilizers are further divided into two categories, major and minor tranquilizers. Major tranquilizers act upon the human brain to control psychic thinking. Examples are mprobamate (Miltown, Equanil), Chlordiazepoxide (Librium) and diazepam (Valium).

Volatile Inhalants

They are substances which are ingested by breathing or smelling. Most act quickly upon the tissues as a depressant, slowing down respiration and other bodily functions. A few substances, such as Nitrous Oxide and Amyl Nitrite have medical uses while mother others involve recreational use. Other examples of inhalants are nail polish removers, model airplane glue, spot removers, gasoline products, and aerosol sprays.

A number of commercial products do not fall neatly in these categories. For example, most over-the-counter medications are mild forms of either stimulants and depressants. Some professionals consider this group of drugs to be a separate category of drugs. Included in this group would be laxatives, cough preparations, sleep aids, pain relievers, sedatives, and aspirin products.

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A Brief History of Alcohol Use

There are many stories about how alcohol was first discovered by man. No one really knows when the discovery was actually made.

The history of the use of distilled liquor in the United States begins at the very first colonization of the continent of North America. . . The Puritans who settled the Massachusetts Bay Colony brought with them attitudes and beliefs from the old country and did not prohibit drinking but punished severely, with 'dunking' or flogging, citizens who were found to be inebriated, particularly on the Sabbath.

By 1800, alcoholic beverages had become a basic part of the economy of the United States. . . Later with the acceptance of alcoholic beverages as a household item and a commodity in the national economy came a growing suspicion that alcohol, particularly in the stronger distilled forms, rum and whiskey, was involved in some social, health and moral problems. As had occurred in earlier civilizations, temperance groups were formed to convince people to be moderate in their use of alcohol. The early groups were generally religiously affiliated and were dedicated to the thesis that any abuse of the body was sinful. They did not try to eliminate the use of alcohol, only the excessive use of this substance.

Later temperance groups began to require pledges asking people to refrain from the use of all alcoholic beverages, including wine and beer. This change led to a problem of the interpretation of the religious implications of alcohol over which some groups have been divided ever since. Some sects taught that any use of alcohol is wrong; others taught that alcoholic beverages are from the fruits of nature and therefore basically good and that it was the abuse, not the use, of alcohol which was evil.

The culmination of the temperance movement was the drive toward legal prohibition. Between 1874 and 1919, 33 states adopted prohibition of some kind. On January 16, 1920, the 18th. Amendment to the Constitution was declared law, and 177,000 saloons, 1,247 breweries, and 507 distilleries in the United States were closed.

People who wished to drink had no notion of being deprived of their liquor. It became the smart thing to drink, and many who had been temperate in their habits before were now moved to imbibe freely as a protest against the legal invasion of their 'personal liberty'. . . the demand for liquor still existed and private enterprise, although in their instance working outside the law, showed great efficiency in meeting the consumer's demand. Inevitably, the enormous profits from this illicit trade led to fierce competition, in which the richer and more ruthless operators triumphed.

In its final report, submitted January 20, 1931, the Commission on Law Enforcement and Observance branded prohibition enforcement as a failure, noted the increase in

corruption that had accompanied it, deplored its undermining of law enforcement generally, and regarded with alarm its demoralizing effect on the federal judicial system.

In February, 1933. . . a resolution proposing repeal of the Eighteenth Amendment was passed.

Today in the United States, the proportion of drinkers (among adults aged 21 and over) rose from 40 percent of women and 65 percent of men before World War II to over 60 percent of women and near 80 percent of men in recent years. These drinkers consumed an average of 2.97 gallons of absolute alcohol in 1973; about 45 percent was obtained from distilled spirits, 45 percent from beer, and 10 percent from wine.¹⁰

About seventy percent of today's teenagers drink. . . anything from a single drink to several drinks. Because of their curiosity, teens usually experiment with alcohol at about the age of thirteen or fourteen. About fifty percent of teenage drinkers have been drunk at least once in their life, while twenty percent get drunk at least once a month. About five percent of all teenagers experience problems with alcohol.¹¹

Many people would never think of using marijuana, yet they find alcohol acceptable. However, alcohol has the potential of being addictive and dangerous.¹²

Surveys show half of all male high school seniors and nearly 20 percent of all ninth-grade boys have drinking problems that affect school work and cause run-ins with police, school administrators, teachers, parents, and friends. More than 5,000 teens are killed in alcohol-related auto accidents each year.¹³

HOW DOES ALCOHOL AFFECT A PERSON WHEN HE/SHE DRINKS IT?

1. It rapidly enters the bloodstream (no indigestion needed) and circulates to all parts of the body within a few minutes. Absorption is slowed by food in the stomach.
2. Main effect is on the Brain where control centers are 'knocked out' one by one resulting in intoxication.
3. The body burns up pure alcohol at the rate of about $\frac{1}{2}$ oz. per hour. (This is the amount of alcohol in a 12 oz. beer, 5 oz. glass of wine or cocktail made with $1\frac{1}{2}$ oz. of 80 proof whiskey.) A 150-lb. person can consume 1 drink in 1 hour with no accumulation of alcohol in the blood.¹⁴

Table 1 shows the effects of alcohol on the drinker in relation to the amount of alcohol ingested.

TABLE 1
SOME EFFECTS OF ALCOHOL¹⁵

Amount of Alcohol Taken into Body	Percentage of Alcohol in	Probable Effects on Drinker (68 kilograms, or 150 lb.
1 cocktail (44 milliliters, or 1½ ounces) of distilled liquor or 1 glass of wine (118 milliliters, or 4 ounces) or 2 beers (710 milliliters, or 24 ounces)	.03 (3 parts alcohol to 10,000 parts blood)	Slight change in feelings, mild relaxation
2 or 3 cocktails or 2 to 3 glasses of wine or 4 to 6 beers	.04-.09	Some depression of judgment, reaction time, and muscle control; emotions stronger; behavior noisier
4 to 5 cocktails or 4 to 5 glasses of wine or 8 to 10 beers	.10-.15	Probable intoxication, major depression of mental and physical skills (movements clumsy, thinking cloudy)
5 to 10 cocktails or 5 to 10 glasses of wine or 10 to 20 beers	.15-.30	Obvious intoxication, loss of muscle control, mental confusion
10 to 20 cocktails or 10 to 20 glasses of wine	.30-.60	Sleep, unconsciousness (death possible)

WHAT LONG-TERM EFFECTS CAN RESULT FROM ALCOHOLISM?

1. Liver Damage, especially cirrhosis (scarring of the liver); also alcoholic hepatitis, cancer of the liver.
2. Heart Disease, including enlarged heart, congestive heart failure.

3. Ulcers and Gastritis, due to irritation of the stomach lining by alcohol.
4. Malnutrition, because alcohol has no food value. Alcohol robs the body of some vitamins and minerals and interferes with digestion of food that is eaten.
5. "DT'S" (Delirium Tremens), resulting from alcohol withdrawal, characterized by disorientation, memory impairment and sometimes hallucinations, etc.
6. Cancer of the mouth, esophagus or stomach, due to irritation by alcohol.
7. Brain Damage, possibly leading to psychosis.
8. Damage to Developing Fetus if mother drinks while pregnant.¹⁶

Figure 1 (p. 21) shows the effects of alcohol consumption on the various parts of the body.

WHY DO PEOPLE DRINK?

Usually there's a combination of reasons

1. To relieve tensions
People use alcohol as an escape from the problems, pressures and tensions of everyday life.
2. To compensate
When shyness or low self-confidence is a problem, alcohol may be used as a 'cure' to overcome fears.
3. As a substitute
Alcohol is used to cover up feelings of insecurity and guilt, and as a substitute for personal relationships, challenging work, self-fulfillment.
4. Family habits may influence attitudes toward drinking; children may imitate parents.
5. Social and cultural acceptance of drinking may encourage alcohol use, too.¹⁷

WHY SOME PEOPLE DO NOT DRINK ALCOHOL!

1. Do not like the taste of alcohol
2. Do not like the effect alcohol has on the body
3. Friends do not drink alcohol
4. Religion opposes the drinking of alcohol
5. Alcohol is too expensive
6. Think drinking alcohol leads to alcoholism
7. Do not want to lose control over mind and muscles even for a short period of time¹⁸

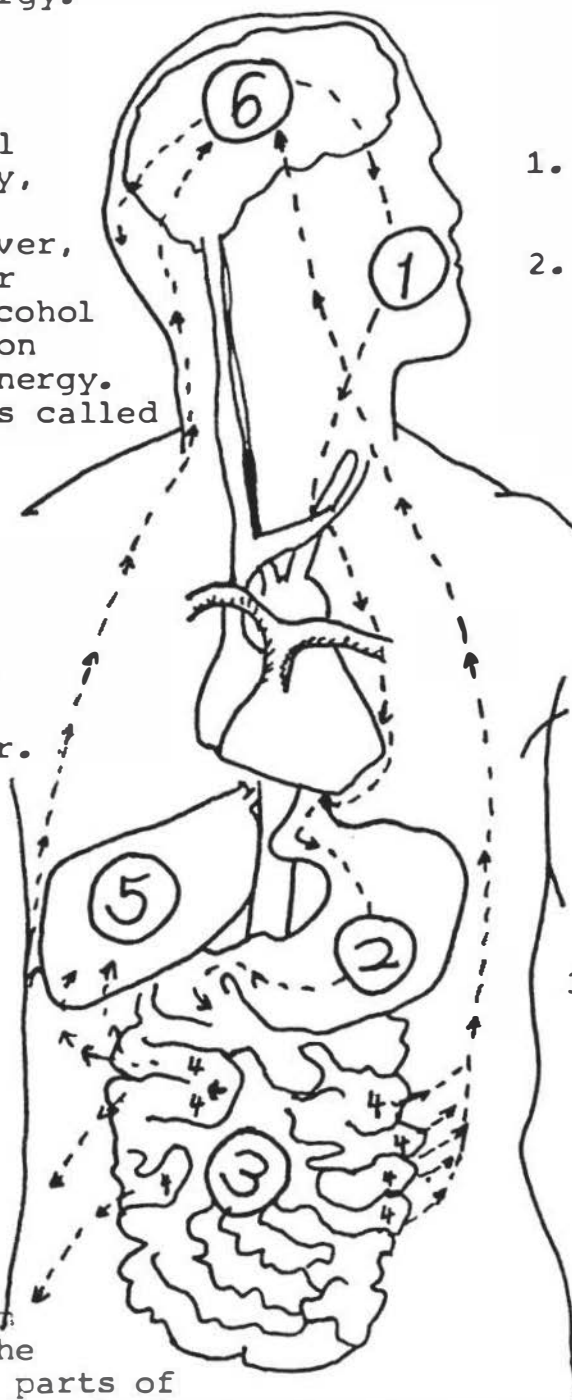
Figure 119

6. Brain. Alcohol goes to the brain almost as soon as it is drunk. The bloodstream carries it there. Alcohol keeps passing through the brain until the liver has had time to change (oxidize) all the alcohol into carbon dioxide, water, and energy.

5. Liver. As the bloodstream carries alcohol around the body, it carries it through the liver, too. The liver changes the alcohol to water, carbon dioxide, and energy. This process is called oxidation.

The liver can oxidize (change into water, carbon dioxide, and energy) only about one-half ounce of alcohol an hour. This means that until the liver has time to oxidize all the alcohol, the alcohol keeps on passing through all parts of the body including the brain.

4. Bloodstream. The bloodstream then carries the alcohol to all parts of the body, such as the brain, heart, and liver.



1. Mouth. Alcohol is drunk.

2. Stomach. Alcohol goes right into the stomach. A little of the alcohol goes through the wall of the stomach and into the bloodstream. But most of the alcohol goes down into the small intestine.

3. Small intestine. Alcohol goes from the stomach into the small intestine. Most of the alcohol then goes through the walls of the intestine and into the bloodstream.

WHAT IS ALCOHOL ABUSE?

Alcohol abuse is the irresponsible drinking which harms or endangers the drinker or other people."²⁰ The heavy costs of alcohol abuse:

1. Falls. Alcohol is related in up to 50% of all deaths from falls.
2. Sickness. Health and medical costs due to alcohol abuse amount to \$13 billion a year in the U. S.
3. Highway accidents. 23,000 people are killed on U. S. highways each year by drunken drivers.
4. Nearly half of all adult fire deaths involve alcohol.
5. Suicide. The risk of suicide for alcoholics is 30 times greater than in the rest of the U. S. population.
6. Lost Productivity due to alcohol abuse costs \$19 billion a year in the U. S.
7. Hidden cost of broken families, abused children, ruined careers, lives cut short.
8. Alcoholism may result.²¹

"Today, in the U. S., there are 100 million drinkers and 10 million are chronic abusers of alcohol (many more are occasional abusers).²²

THE MOTHER, THE FETUS AND ALCOHOL

Two government researchers report that for a pregnant mother to take even moderate amounts of alcohol can cut off oxygen to the fetus. The possibility is that repeated drinking during pregnancy can permanently injure the brain and nervous system of the unborn child.

Pregnant monkeys were used for the experiment, conducted by Dr. Anil B. Mukerjee and Dr. Gardy D. Hodgen, of the National Institute of Child Health and Human Development, according to an account in the New York Daily News. Through partial Caesarian sections, the infant monkeys could be observed while still in the womb. When the mothers were injected with alcohol, raising their blood alcohol levels to the equivalent of those in women who had had three to five drinks, it was found that, within fifteen minutes, all of the blood vessels in the umbilical cords linking mother and fetus through the placenta had collapsed. Oxygen levels in the blood of the developing infants dropped. The amount of acid in their blood rose to dangerous levels.

The umbilical cords and the fetuses went back to normal inside an hour. The concern is that repetitions of the experience might cut the chances of such recovery. (When pregnant monkeys were injected₂₃ with salt or sugar solutions, no adverse effects were seen.)

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History of Depressants

Throughout time man has sought relief from pain and discomfort. At the turn of the twentieth century bromides were being used to combat sleeplessness, anxiety, and minor pain. But with the discovery of sedative derivatives of barbituric acid in the late 1800's bromides were gradually replaced with these more recent drugs, the barbiturates. In 1903 the first barbiturate, Veronal, was put on the market, soon followed by Luminal.

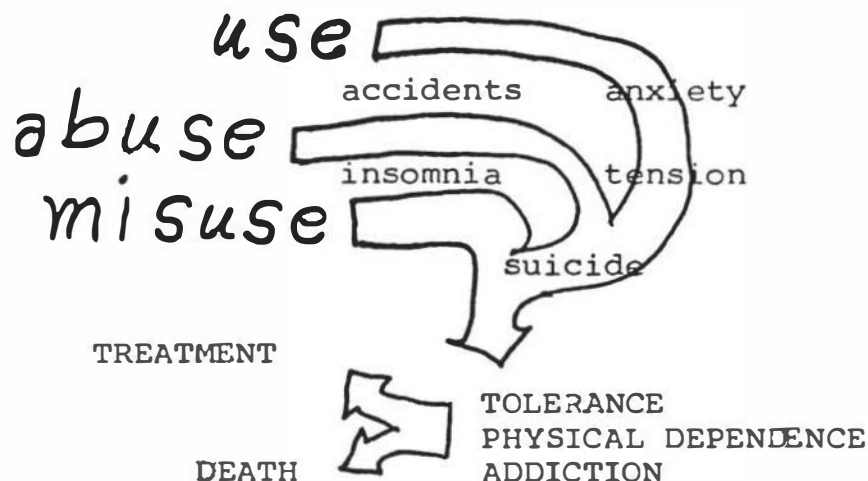
Because of their anti-anxiety and anti-tension qualities, a number of barbiturates began to be misused and abused. With this misuse and abuse, the dangers of these drugs became quite apparent. It was found that barbiturates created tolerance, that they were physically and psychologically addicting, and that abrupt withdrawal of the drug after chronic abuse would create an abstinence syndrome more severe than that caused by any other drug. Although there are other dangers involved, it was mainly because of the addictive nature of the drug and its potential for respiratory depression that research was conducting for safer drugs. The main outcome of this research was the discovery of various tranquilizers in the 1950's. However, many of these substances have been found to be as dangerous as the drugs for which they were substituted.

Barbiturates are eliminated via the kidney at varying rates; it is the rate of elimination that determines whether the barbiturate is short-, intermediate-, or long-acting. If a barbiturate is rapidly metabolized, the onset of its effects is quick and the effects are short-lived. Conversely, if it is metabolized slowly, its action is not felt so quickly and the effects are of longer duration. The short-acting barbiturates used for insomnia do not cause a morning 'hangover' because the barbiturate is removed from the system during the night; the long-acting barbiturates, however, produce some 'hangover' effect because they may not be completely metabolized overnight.

Tranquilizers apparently do not have the same mechanism of action as the barbiturates, and they produce their effects without sedation (unless large doses are taken). Their action is that of not allowing the brain to respond to acceleratory impulses, thus relieving anxiety and depression.

When using barbiturates or tranquilizers, a person should be very careful not to abuse or misuse them. These drugs can be dangerous as illustrated in figure 2 (p. 25).

Dangers of sedative use²⁵
Figure 2



WHY PEOPLE ABUSE DEPRESSANTS

The American Medical Association has categorized the different types of individuals who abuse sedative drugs.

1. Those who seek sedative effects to deal with emotional stress. This sedation may be carried to extremes where the person seeks almost total oblivion and stupor, moving about only to answer nature's call or to take more drugs.
2. Another group seeks the paradoxical excitation which has been seen to occur, especially after one can tolerate large doses of the drug. Now instead of depression, the person feels exhilaration--much like the initial effect of amphetamines--and uses the drug for typical stimulatory reasons.
3. Many sedative users take the drug to counteract the effects of abusive use of stimulants and LSD. This kind of use may set up a cycle of ups and downs that eventually leads to addiction.
4. There is a group that uses sedatives in combination with other depressant drugs, mainly alcohol and heroin. Alcohol plus the sedative gives a more instant 'high' but is especially dangerous because of the double depressant action. Heroin users often resort to barbiturates if their heroin supply is cut off.²⁶

TOLERANCE AND PHYSICAL DEPENDENCE

The effects of depressants may vary not only from person to person but from time to time in the same individual. Low doses produce mild sedation. Higher doses, insofar as they relieve anxiety or stress, may produce a temporary sense of well-being; they may also produce mood depression and apathy. In marked contrast to the effects of narcotics, however, intoxicating doses invariably result in impaired judgment, slurred speech, and loss of motor coordination. In addition to the dangers of disorientation, resulting in a high incidence of highway accidents, recurrent users incur risks of long-term involvement with depressants.

Tolerance to the intoxicating effects develops rapidly, leading to a progressive narrowing of the margin of safety between an intoxicating and lethal dose. The person who is unaware of the dangers of increasing dependence will often increase the daily dose up to 10 to 20 times the recommended therapeutic level. The source of supply may be no further than the family medicine cabinet. Depressants are also frequently obtained by theft, illegal prescription, or purchased on the illicit market.

Members of the drug subculture often resort to the use of depressants as self-medication to soothe jangled nerves brought on by the use of stimulants, to quell the anxiety of 'flashbacks' resulting from prior use of hallucinogens, or to ease their withdrawal from heroin. The dangers, it should be stressed are compounded when depressants are used in combination with alcohol or other drugs.

TRANQUILLITY

Tranquilizers

These drugs, first used in medicine in the early 1950's, are sold in tablets or capsules of various sizes, shapes, and colors. They are also available as syrups, suppositories, or in solution (for injection). There are two main types of tranquilizers: major and minor.

Major tranquilizers are most often used to treat mental patients. They have enabled many to leave the hospital. Inside mental hospitals, treatment is made easier by the calmer atmosphere produced by these drugs. Most experts believe that major tranquilizers do not produce dependence.

There are many different kinds of minor tranquilizers. They are used to treat sleeplessness, anxiety, tension, pre-menstrual distress, muscular tension or pain, headache, and high blood pressure. They are also used to treat abnormally excitable children.

Many people use minor tranquilizers on a doctor's orders without ever talking too much or suffering ill effects. They are among the most widely used drugs. However, use of these drugs without medical supervision or in more than prescribed doses may cause serious harm.

Short-term effects of minor tranquilizers: Minor tranquilizers reduce the activity of parts of the brain that are involved in emotional reactions and alertness. How much this activity is reduced depends on the dose taken, the tranquilizer used, the setting or circumstances, and the person who takes it. Generally they calm tense or anxious people and make them less alert. Prescribed doses usually last three to six hours. Some people who use minor tranquilizers may get a 'hih' feeling, especially during the first few weeks of use. Some may get a sleepy feeling; but if this effect occurs, it tends to be short-lived.²⁸

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"Amphetamines, first produced for medical use in the 1920's, are stimulants to the central nervous system and are best known for their ability to combat fatigue."²⁹

Most amphetamines are obtained and used illicitly. Users take amphetamines to push themselves beyond their normal limits. Users include athletes trying to play faster, broadcast and business personalities trying to brighten up, and long-distance truck drivers trying to stay awake.

Amphetamines can cause a strong psychological dependence. Infrequently or 'special occasion' use does not usually lead to a dependence, but it can. A person who takes an amphetamine feels as if he or she could go on and on without any rest. But the body is not prepared for 'no rest.' So when the 'up' feeling begins to fade, the body reacts through extreme tiredness. Often the user becomes depressed. To prevent 'crashing' (coming down from the drug), the person takes more amphetamines.

In addition, tolerance can build up, as the user needs an even larger dose to get the same effect. This kind of use can lead to psychological dependence.

The stimulant methamphetamine (speed) produces great rushes of high feelings when it is taken intravenously. When tolerance to speed develops, the user must inject a dose every few hours. This kind of use can be fatal.³⁰

CAFFEINE

There are many kinds of stimulants. The most common everyday stimulant is caffeine. Caffeine is found in popular drinks--coffee, tea, and colas. People use these drinks as 'wake-me-ups' and 'pick-me-ups.' And caffeine is found in many non-prescription, sleep-preventative medications.³¹

COCAINE

Cocaine is a white powder that is made from the coca bush which grows in South America. For centuries native of Peru and Bolivia have chewed on coca leaves to ease hunger pains. Medically, solutions of

cocaine can be used to numb areas of the body during surgery; but other drugs, like procaine, are now used more often. The only legal use for cocaine today is as a local anesthetic.

A cocaine high is much like the high from a dose of amphetamines. The user becomes over-alert, talkative, and sometimes aggressive. Young people are at apecial risk to drugs like cocaine because it is easy to become psychologically dependent on it. Since its effects wear off quickly, some users keep taking the drug to keep from crashing.

Until recently, cocaine was almost always 'snorted' (inhaled by sniffing through the nose). Continued snorting of cocaine can seriously damage the nose. Cocaine also can be injected into the veins or smoked. These methods of taking cocaine increase the danger of serious side effects. Some users smoke a substance called 'freebase' which is the most toxic form of the drug. Smoking cocaine increases the chances that users will experience anxiety; extreme agitation; weight loss; sleeplessness; and feeling, hearing, and seeing things that aren't there. One of these imaginary experiences is the sensation that bugs or snakes are crawling under the skin.

An overdose of cocaine can cause death. Doses large enough to kill a person usually are injected or swallowed.

Like many other drugs, habitual use of cocaine by young people can interfere with normal physical and mental growth.³²

COCAINE CRISIS

Use of cocaine has reached critical levels in this country; it has almost certainly produced patterns of abuse remindful of those caused by heoin in the Sixties and Seventies. Jane E. Brody, writing in the New York Times, reports: 'Without question, the number of users of cocaine is escalating with frightening rapidity across the country. According to an analysis of calls last month (April, 1984) to a national cocaine hot line, more than two-thirds of the callers came from small and medium-size cities, and towns throughout the United States. Last year, in a similar analysis, two-thirds of the calls came from large urban centers in New York, California and Florida.'

Ms. Brody points out also that the cocaine hot-line (800-262-COCAINE) has had more than an average of 1000 calls a day: 'A random sample of 1000 callers during

April revealed that 96 percent have intense cravings for the drug, 91 percent have suffered medical problems from using it (including chronic headaches, nosebleeds, sinus problems, difficulty swallowing and diminished libido). 73 percent said they preferred cocaine to food, and 52 percent were afraid their work would suffer if they stopped using it.'

Though cocaine has been popularly regarded as non-addictive, Dr. Mark S. Gold, medical director of the 800-262-COCAINE hot-line, and director of research at Fair Oaks Hospital, in Summit, N. J. says: 'Callers to our hot-line tell us they cannot stop, even though they recognize that it is destroying their lives.' The literature is rich in stories of users spending hundreds, even thousands of dollars a week on the drug.

The big upward push to cocaine came, of course, from the mistaken idea that it was non-addictive. Almost every 'big' drug we know of was launched on the basis of some such notion. Heroin itself first came in as a supposed safe alternative to morphine. After one of these new drugs comes in, it takes several years for addiction problems to show themselves. These problems have certainly shown up in cocaine use. Ms. Brody points out that 'each day, 5,000 more Americans become cocaine users. Once a drug used mainly by well-to-do men in their 20's and 30's, an increasing proportion of users are blue-collar workers and women.'

Roy M. Goodman, a Republican state senator in New York, in a New York Times article, quotes testimony by Pete Rozelle, the National Football League Commissioner, before the State Senate Investigations Committee: 'In some circles,' Rozelle said, '(cocaine) has replaced candy and flowers in the dating process.' Goodman adds that 'the statement could just as easily have applied to doctors, lawyers, bakers, brokers, journalists and politicians. The very highest achievers in our society, many of whom are role models for children, many of whom we depend on in crucial areas of our lives, are being entangled in cocaine in greater and greater numbers.' he adds that cocaine use in New York State has almost tripled in the past five years.

Not everybody stood around quiescently, with egg on his or her face, however, while the cocaine threat grew. In 1977, the National Institute on Drug Abuse warned in a research monograph, 'Cocaine--1977' that one million Americans had reported using cocaine in a single recent month. It also noted that heavy use of cocaine 'can cause sleeplessness, anxiety, and sometimes paranoid delusions and hallucinations. Repeated snorting can destroy the mucous membranes in the lining of the nasal passages. . .'

'There is a saying in the drug world that there is no such thing as recovering from a cocaine overdose. With too much 'coke' one becomes hyperactive and nauseous, but a true overdose seems always fatal. There are instant convulsions, and the final cause of death is said to be

cerebral hemorrhage--on the street the expression is that the user's "brain runs out of his nose."³³

COCAINE AND HEROIN: A RELATIONSHIP?

'Over the past few years, cocaine activity has shown rapid increases in New York City,' reports "OUTLOOK on Substance Abuse," published by the New York State Division of Substance Abuse Services (DSAS). 'Although it has lagged behind heroin activity, cocaine activity now appears to dominate the drug scene in New York City.' Among trends which the report cites are these:

'Between 1978 and 1980, the number of cocaine felony and misdemeanor arrests hardly changed. By 1981, if increased more than 35 percent, 1,700 to 2,300. By 1983, there were more than 10,000 cocaine-involved arrests made by the New York Police Department. The police laboratory also reports increasing purities in the cocaine exhibits analyzed. At the end of 1982, the median purity was 28 percent, by the middle of 1983, the median was 40 percent.

'Since 1980, the Street Studies Unit of DSAS has found cocaine readily available throughout the City. Over the years, an increasing number of people have been found selling and using cocaine on the street. Of the 25 major drug copping areas in the City, cocaine is available at 20.

'According to the Drug Enforcement Administration, there is a current glut of cocaine on the market...'

The DSAS report then goes on to relate cocaine with heroin:

'In the first nine months of 1983, the proportion of heroin admissions (to hospitals) had been declining. These declines come at a time when there has been an increase in the proportions of admissions reporting cocaine as the primary drug of abuse...

'It is no accident' says the report, 'that heroin activity and cocaine activity follow almost identical trends. There are many similarities and interrelations in supply and demand that help to explain the concurrence...the street level distribution system in New York City is often able to provide both heroin and cocaine, and eager to do so...The most important demand factor is the combined effects of the two drugs. Users of heroin often prefer the combined euphoric effects of the two drugs taken together, i.e., the 'speedball.' On the other hand cocaine users experiencing the anxiety and overstimulation brought on by the drug often seek relief through the use of heroin.

'Finally, in the progression of substance use among heroin users, it appear that cocaine use often precedes heroin use. Cocaine use is more widely accepted, regarded by many as a chic, recreational drug. Once the cocaine 'barrier' is broken, heroin use appears not to be so formidable, especially if it is readily available.'

'The mode of administration may even facilitate the progression. For instance, the snorting of cocaine makes the snorting of heroin not an enormous departure. Similarly, the intravenous use of cocaine make the injecting of heroin that much easier.'³⁴

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Tobacco smoking is very common in most parts of the world today.

There was a time, however, when it was not common. Records show that tobacco has been smoked for thousands of years in only a few places in the world. These places are mainly in Latin America. It was not until after 1492 that tobacco became widely used in the rest of the world. . . .

At first, tobacco was carried by ship from the West Indies for sale in Europe, the Middle East, and Asia. . . soon people found the soil and the climate of places other than the West Indies to be suitable for the growing of tobacco plants. Among these places were some of the colonies in America. . . .

During colonial times in America, people smoked tobacco mainly through pipes. But some people chewed tobacco because they liked the taste, spitting out the juice resulting from the chewing. Some people sniffed a powder of finely ground tobacco called snuff. Sniffing this powder originated in Europe. Since colonial times, changes involving tobacco and its uses have taken place. . . .

Like people of colonial times, some people today chew tobacco, and many people smoke tobacco by using pipes, cigars or cigarettes. . . .

The United States alone produces about 558 billions cigarettes a year as compared to producing about 8 billion cigars a year. Cigarettes come in many forms, and new forms are being introduced by cigarette manufacturers every few years.³⁵

CONTENTS OF TOBACCO SMOKE

Though the amount of smoke taken into the body from cigarette, cigar, or pipe tobacco may vary because some people do not inhale the tobacco smoke, the smoke from cigarettes, cigars or pipe tobacco contains many of the same substances.³⁶

When you look at the end of a filter-tipped cigarette, you will notice a yellow-brown stain. This is caused from a substance called tar. Tar is made up of many substances such as solids, other liquids, and gases.³⁷

One of the most discussed substances in tobacco smoke is nicotine.

Nicotine, which is found in the leaves of the tobacco plant, is a poison. In its raw form, a very small amount of nicotine in a person's bloodstream could kill that person. However, the amount of nicotine that goes into a person's mouth from the smoke of cigar, pipe, or cigarette tobacco is quite small, though still potentially harmful. The reason the amount of nicotine a smoker gets is small is partly that some of the nicotine is burned off as the tobacco is burned and that some of the nicotine goes into the air before reaching the smoker. In the case of filter-tipped cigarettes, additional nicotine is trapped by the filter.³⁸

Another substance found in tobacco smoke is carbon monoxide. This is a colorless, odorless gas formed from the burning of fuels.

This is the same gas found in automobile exhaust. When extremely large amounts of carbon monoxide are inhaled that prevent the needed amount of oxygen inhaled from being used by the cells. Without that needed amount³⁹ of oxygen, the cells of the body eventually die.

HEALTH RISKS

What is new in the U. S. Surgeon General's current report on smoking? The case against smoking is an old one -- let's isolate the new factors, as Dr. C. Everett Koop reported them. They come down to these and they are impressive:

** The warning that smoking may now be causing nearly one-third of all cancer deaths. If it weren't for lung cancer deaths caused by smoking, overall cancer mortality would have fallen.

** The first caution by government health officials recommending that non-smokers avoid being exposed to secondhand smoke -- the fumes of smoking by others. Though evidence is conflicting, the Surgeon General says that recent studies of the effects of inhaling secondhand smoke are enough to consider such exposure 'a public health potential hazard.' Dr. Edward Brandt, Jr., assistant secretary for health, says in the report that 'prudence dictates that non-smokers avoid exposure to secondhand tobacco smoke to the extent possible,' told reporters that non-smokers should keep out of smoke-filled rooms.

** 'Cigarette smoking is clearly identified as the chief preventable cause of death in our society.' and as the 'most important public health issue of our time,' by the surgeon general. Tobacco kills 240,000 Americans a year, it is estimated.

** The report cites smoking as not only a major cause of lung cancer but also of cancers in the larynx, the mouth and upper throat, and the esophagus. Smoking is also now listed as a contributing factor in development of cancers of the bladder, pancreas and kidneys.

** Pipes and cigars are cited, along with cigarettes, as being 'causal factors' for cancers of the lungs, mouth, larynx, etc.

** Calculating the risks: It is estimated that 85 percent of lung cancer deaths could have been avoided, if the persons involved had not been smokers. Men who smoke have twice the chances of dying of cancer as men who do not smoke. The risk for women is 30 percent higher for women smokers than for women nonsmokers, and it is rising. Those who smoke two or more packs a day are 15 to 20 times as likely to die of lung cancer as people who don't smoke. Among women, lung cancer seems likely to pass breast cancer as a cause of death during the 80's.

** This is the first such report to mention smoking in connection with stomach cancer, saying that an 'association' has been found.⁴⁰

SMOKING MEANS SMALLER, LIGHTER BABIES

A two-and-a-half year study of pregnant women in the Baltimore area found that women who cut out smoking, or cut it down, gave birth to babies heavier than babies born to a group of mothers who generally went on smoking, at their customary levels. 935 pregnant women, all smokers, were studied by researchers of the University of Maryland School of Medicine.

About half the women (according to a report in the Journal of the American Medical Association) were given counseling to help stop smoking. In this group, 62 percent gave up smoking, or reduced their use of cigarettes. In the group that did not receive counseling only 32 percent stopped smoking, or cut down.

Results: Babies born to women, as a whole, in the group that received counseling averaged 92 grams (more than 3 ounces) heavier and six-tenths of a centimeter longer than babies born in the group that received no anti-smoking help. The Journal, in an editorial, called the weight differences, though not large, 'striking.' Babies who are below average in size are considered more vulnerable to illnesses, etc.⁴¹

NO CLEAR GAIN FOUND IN SMOKING MILDER CIGARETTES

Smoking cigarettes with lowered tar and nicotine content results only in 'doubtful' health benefits, reports a panel of experts at the National Academy of Sciences. According to the Associated Press, the experts said that smokers who switch to cigarettes with lower tar and nicotine may increase their consumption to make up for getting less of the ingredients they crave. This might wipe out possible benefits. The experts also said that cigarettes with less tar and nicotine may have unknown flavoring additives that 'may prove to be risk factors.' The way to protect one's health is 'to quit smoking entirely,' the panel reported to the National Research Council.

What has the experts worrying is that while the average tar and nicotine content of cigarettes dropped by about half from 1855 to 1975, deaths from cancers of the respiratory system went up about 70 percent in the same period. The report called this 'a substantial and unexpected increase.'⁴²

QUITTING

QUIT TIPS

1. Don't carry a lighter or matches; hide all ashtrays.
2. When the urge to smoke hits, take a deep breath. Hold it for ten seconds, then release it slowly, then take deep rhythmic breaths.
3. Spend your day where smoking is prohibited, library, theatre, museum. Lunch with friends who are also trying to quit smoking, at a restaurant with a 'no smoking' section.
4. Eat rather than smoke - low calorie, high nutritional foods, fruit, crunch vegetables, unbuttered popcorn.
5. Exercise. Climb stairs. . .walk.
6. Drink liquids - water, herbal teas, fruit juices. Pass up caffeine.
7. Keep your hand occupied - doodling, knitting, use a calculator to see how much you're saving by not smoking.
8. Change your habits connected with smoking - instead of a cigarette on your break, take a low-calorie snack, or drink.

9. Wrap your cigarettes in a sheet of paper, then a rubberband. If you take one, you must re-wrap.
10. Tell everyone you are quitting, ask them to help you not to backslide.
11. Treat yourself well. Indulge in bath, massage, nap, your favorite music, a movie. ⁴³You don't need a cigarette to have a good time.

QUITTING/WOMEN

It appears that women have more trouble than men in stopping smoking. Men, according to a study by University of Minnesota researchers, are more willing to try to stop smoking and can stay away from cigarettes for a longer time.

The study, reports United Press International, included interviews with 1,736 smokers in 6 Mid-western communities, from 1980 to 1982. It was part of a community program to study cardiovascular risk, reports UPI. Interesting is the finding that from 70 to 80 percent of the interviewed ⁴⁴said they would like to stop using cigarettes.

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"The term narcotic in its medical meaning refers to opium and opium derivatives or synthetic substitutes."⁴⁵

Morphine is a painkiller. Codeine is used in cough medicines because it helps to stop severe coughing. Paregoric (that's opium dissolved in alcohol) is⁴⁶ used to stop diarrhea and teething pain.

"Narcotics are indispensable in the practice of medicine; they are the most effective agents known for the relief of intense pain."⁴⁷

As useful as narcotics are, there are problems and dangers. One of the most serious dangers is dependence (addiction). Users first become dependent on the feelings of pleasure that narcotics produce. In a relatively short time, their bodies can become dependent on the drug.

A person beginning to use a narcotic regularly may not act any differently than usual. After awhile, however, the user will develop tolerance and will need more of the drug in order to get the same high. If the user doesn't get the drug, withdrawal symptoms begin.

Depending on the extent of physical dependence, the symptoms can be minor or severe. The person shakes, sweats, and vomits. Eyes and nose run. Muscles ache, chills, abdominal pains, and diarrhea develop. The fear of experiencing terrible withdrawal symptoms is part of the reason for not 'kicking the habit.'

To prevent withdrawal, the drug user must have a steady supply of the narcotic.⁴⁸

NATURAL NARCOTICS

OPIUM

"Opium, from the poppy plant, was the ancient forerunner of powerful pain-relieving. . .Some historians suggest that the people of the Stone Age may have been aware of its pain-combatting qualities."⁴⁹

A small amount of opium is used to make antidiarrheal preparations such as paregoric, virtually all the opium imported into this

country is broken down into its alkaloid constituents, principally morphine and codeine.

There were no legal restrictions on the importation or use of opium until the early 1900's. In those days patent medicines often contained opium without any warning label. Today there are state, federal, and international laws governing the production and distribution of narcotic substances, and there is little abuse of opium in the United States.⁵⁰

MORPHINE

Morphine is one of the most effective drugs known for the relief of pain. It is marketed in the form of white crystals, hypodermic tablets, and injectable preparations. . . Morphine is odorless, tastes bitter, and darkens with age. . . Tolerance and dependence develop rapidly in the user.⁵¹

CODEINE

As compared with morphine, codeine produces less analgesia, sedation, and respiratory depression. It is widely distributed in products of two general types. Codeine for the relief of moderate pain may consist of codeine tablets or be combined with other products such as aspirin or acetaminophen.⁵²

SEMI-SYNTHETIC NARCOTICS

HEROIN

Heroin is the most prominent of the semi-synthetic narcotics.

First synthesized from morphine in 1874, heroin was not extensively used in medicine until the beginning of this century. The Bayer Company in Germany first started commercial production of the new pain remedy in 1898. While it received widespread acceptance, the medical profession for years remained unaware of its potential for addiction. The first comprehensive control of heroin in the United States was established with the Harrison Narcotic Act of 1914. Pure heroin is a white powder with a bitter taste. Illicit heroin may vary in color from white to dark brown because of impurities left from the manufacturing process or the presence of additives such as food coloring, cocoa, or brown sugar. Pure heroin is rarely

sold on the street. A 'bag'--slang for a single dosage unit of heroin--may weigh about 100 mg. usually containing less than 5 percent heroin. To increase the bulk of the material sold to the addict, diluents are mixed with the heroin. . . . Sugars, starch, powdered₅₃ milk, and quinine are among the diluents used.

Heroin can be snorted or it can be taken orally or subcutaneously, 'skin popping' or 'joy popping.' For maximal effect, abusers usually₅₄ inject narcotics directly into a vein ('mainling').

Heroin abusers can sometimes be identified either from scars left from injection sites or the paraphenalia used.

"The characteristic instruments and accessories are a bent spoon or cottle cap ('cooker'), small ball of cotton ('satch'), syringe or eyedropper, and a hypodermic needle."₅₅

A CHEAP "SUBSTITUTE" FOR HEROIN

Addicts have found 'an inexpensive and hazardous substitute for heroin,' according to a New York Times report by Glenn Fowler. The heroin substitute is called 'loads' by addicts, and, says Fowler, 'consists of two prescription-drug tablets taken together; glutethimide, a hypnotic sedative that is sold under the brand name Doriden, and a pain-killing pill containing codeine.'

The two drugs, it is pointed out, are safe when prescribed individually, but 'act as a severe depressant to the nervous system when combined and can be dangerous for the user.' A federal prosecutor calls the drugs when taken together 'a particularly vicious combination.' The heroin substitute sells on₅₆ the street for \$8 to \$10 for a pair of tablets.

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Cannabis--which includes marijuana, hasish, and hasish oil--has been used by large numbers of people in many countries even though its possession and sale are against the law in most parts of the world. However, the majority of North Americans who have tried cannabis have done so only occasionally. Those who use it give a number of reasons for doing so. Many say they are curious and want to find out what it is like. Others have taken it in order to be sociable or because their friends use it. A large number say they take it mainly because they enjoy the way cannabis makes them feel.

THE CANNABIS SATIVA PLANT

Marijuana, hashish oil and hashish come from a tough, vigorous plant, Cannabis Sativa, which grows in many areas of the world. Scientists refer to these three products collectively as cannabis or cannabis preparations. There are two main types of the Cannabis Sativa plant, each used chiefly for different purposes. One type generally found growing in the wild, produces a very good hemp fiber which has long been used for making rope. It produces a relatively small amount of a substance called tetrahydrocannabinol which is often referred to simply as THC. The second type of Cannabis Sativa originated in hot climates although it can grow in other places. It contains higher concentrations of THC, but its fiber is not as suitable for making rope. It is this second type which is commonly cultivated (although it also grows wild) for its THC content. THC is the substance that is largely responsible for the 'high' that users seek from cannabis preparations.

Most of the THC in the cannabis plant is concentrated in its top, the flowers and upper leaves having the greatest amount. However, this plant has both male and female forms, and it is the sticky resin on the flowering top of the female plant which has the most THC.

Marijuana is made of the dried flowering tops and leaves. It often contains seeds and stems, as well. Hashish is the dried sticky resin and compressed flowers. Hashish oil is obtained by soaking hashish in alcohol or certain other solvents which are later evaporated. The potency of cannabis preparations (reflecting the amount of THC per unit of weight) is highly variable. Marijuana usually contains the least THC, and is therefore the least potent, while

hashish oil contains the most THC and is the most potent. In general, the more potent cannabis products--hashish and hashish oil--have become increasingly available. . .as have certain much more potent forms of marijuana.

Some dealers sell cannabis to which other substances have been deliberately added; usually this is done to increase the volume so as to make it appear that there is more of the drug than is really the case. Occasionally, other drugs are added. Sometimes, unknown to both buyers and dealers, cannabis contains potentially harmful bacteria, fungi, or chemicals intended to destroy plants, such as paraquat.⁵⁸

WHAT ABOUT THE HEALTH EFFECTS OF REGULAR CANNABIS USE?

As we look at the adverse health effects of regular marijuana use under the various headings such as the respiratory system, etc., it is extremely important for teenagers and their parents to know that the experimental studies on humans, that form much of the basis for the information that follows, have involved only adults mainly healthy young men. Consequently, there is reason to be concerned that cannabis may pose serious health risks--that are not yet understood--for teenagers in their critical maturational years.

Furthermore, as is the case with tobacco, there is likely to be a relationship between the extent of the health effects and the amount of marijuana smoked, as well as the duration and frequency of its use. In other words, with cannabis, as with other drugs, the risk to health increases with increasing doses and length of exposure.

We cannot say that there is a safe level of intake.⁵⁹

RESPIRATORY SYSTEM

Perhaps the area of greatest agreement among researchers concerns the damaging effects of inhaled cannabis smoke on the respiratory system. A single marijuana cigarette yields twice as much tar as a strong tobacco cigarette, and cannabis tar contains substantially higher amounts of some known cancer-producing agents than does tobacco tar. Keep in mind also that many cannabis smokers have developed a style of smoking which can greatly increase the risk of

serious lung damage: they inhale deeply and try to retain the smoke in the lungs longer than tobacco smokers usually do in order to permit the maximum absorption of THC. Moreover, cannabis users tend to smoke as much of the cigarette as they can, usually leaving almost none of the cannabis unsmoked.

Since cannabis users are more likely than non-users to be tobacco smokers, those who are regular smokers of both cannabis and tobacco are at particularly high risk.

Regular cannabis smoking, like tobacco use, is associated with such chronic (that is, long-term) respiratory tract conditions as bronchitis, asthma, sore throat, and inflammation of the sensitive linings of the nasal passages. Preliminary evidence suggests that smoking several 'joints' per day could contribute to lung cancer. ⁶⁰

PERSONALITY AND BEHAVIOR

There has been a great deal of interest in the effects of regular cannabis use on personality and behavior. However, the research findings are not consistent and are difficult to interpret. Some researchers report that individuals who use high doses of cannabis regularly for a long time stop being contributing members of the family and community. They seem to no longer care about themselves or their surroundings; they show decreased ambition and loss of interest in the future. Some regular users do appear to experience these symptoms. However, it is unclear whether or not such problems are the result of cannabis use, or simply occur at the same time. When they do occur, such symptoms usually do not reflect a permanent change in personality, and they tend to disappear gradually when cannabis use is stopped.

Many professionals have expressed concern over the potentially harmful effect of regular use on the developing personality of teenagers, particularly younger teenagers, because this is a period of much rapid and dramatic change. In our society, adolescence is typically one of the most stressful periods of life, even for the most well-adjusted. During this important and lengthy stage of development young people learn (or fail to learn) how to cope adequately with unpleasant but common feelings such as anxiety and depression.

If they regularly use drugs, including alcohol and cannabis, to avoid or to escape from normal

stress, they may be depriving themselves of the opportunity to learn drug-free means of handling the everyday upsets of life. As adults, they are likely to continue to turn to drugs to deal with life's stresses.

SEXUAL FUNCTIONS

Another important area of current investigation is on the effects of cannabis on the reproductive functions. Many people think of cannabis as an aphrodisiac--they believe that cannabis stimulates sexual feelings. Actually, cannabis does not appear to do this directly. Rather, like alcohol, it can reduce inhibitions. And when inhibitions are lowered, some people express sexual feelings more freely. However, such openness in feelings does not occur in all cannabis users. In fact, some regular users experience a reduced interest in sex.

Our knowledge of the effects of regular cannabis use on human reproductive systems is currently very limited. Some researchers have reported changes in hormones in healthy adults. A few, but not all, studies have found a reduced level of testosterone and a lowered sperm count in males who are heavy users, and there is preliminary evidence that cannabis smoking may interfere with the normal menstrual cycle in females. These changes do not appear to be lasting after cannabis use is stopped. However, we know very little about the impact of regular cannabis use on the normal sexual development of adolescents.

The effects of cannabis on the human fetus, resulting from the mother's use of the drug during pregnancy, are not yet clearly understood. Animal studies suggest, however, that exposure to cannabis, either before or after birth, may interfere with normal growth and development. Therefore, it is especially unwise for pregnant women and those attempting to become pregnant to use cannabis.

At this time, there is no evidence that cannabis smoking will have adverse effects on babies conceived after use has stopped.

Once again, it must be noted that a lack of evidence does not necessarily mean we can be certain that there are no harmful effects, as very little research has been done in this area.⁶²

OTHER EFFECTS

There is evidence in animals that cannabis use may interfere with some aspects of the body's immune system--the system that protects the body from disease. It is not yet known whether such an effect is likely to be significant in humans.

The cardiovascular system--the heart and blood vessels--of healthy individuals does not appear to be permanently affected by cannabis use. However, since cannabis increases the heart rate, it is reasonable to expect that the use of cannabis may be particularly harmful to those with heart disease. 63

TOLERANCE

Users experience a reduced effect when they use certain drugs frequently. This phenomenon is called tolerance. When tolerance develops, larger amounts of the drug must be taken in order to experience the same degree of desired effect as was felt initially.

Frequently, cannabis use results in the development of some degree of tolerance to the desired effects. As a result, there is a tendency to increase the amount of drug used at one time. Of course, higher amounts taken regularly result in an increased risk of harmful effects, particularly on the respiratory system and on certain mental functions, such as memory and concentration. 64

CAN YOU BECOME DEPENDENT ON CANNABIS?

Many believe that there are two distinct types of dependence: physical dependence and psychological dependence.

Physical dependence occurs when the body gradually changes the way it functions in the presence of a drug. The 'normal' state of the body then occurs only when the drug is present. When it is absent, unpleasant symptoms are experienced. These symptoms are collectively referred to as a 'withdrawal reaction.'

Some people who use high doses of cannabis several times daily do acquire a mild form of physical dependence on it. When they abruptly stop using cannabis, they may experience mild symptoms such as irritability, nervousness, sleep disturbances, loss of appetite, sweating, and upset stomach.

People can become psychologically dependent on a wide variety of drugs, including cannabis, no matter what dose is regularly used. The psychologically dependent user has a strong need to continue taking the drug, a persistent craving for its effects, and considers the drug to be a necessary part of daily life. Anxiety (and even feelings of panic) may result if the drug is not available. People can be compulsive users of cannabis (that is, psychologically dependent on cannabis) without being physically dependent on it.

WHAT SHOULD I DO IF I THINK I'M HAVING PROBLEMS BECAUSE OF CANNABIS? (or if I know someone who is)

Perhaps you've decided to quit but aren't sure how to go about it. Many young people stop on their own simply by making up their minds and then following a few basic rules they set for themselves.

Most importantly, they make sure they avoid the situations in which they have most often used cannabis. This usually means certain people or particular places. They also plan other things to keep themselves busy so if someone asks them to smoke marijuana they have a ready-made reason to say 'no.' Often, they think about what others might say to try to talk them into using cannabis, and they rehearse answers in their minds or out loud to help them avoid the pressure.

For some, stopping on their own is too difficult, especially if they have been using a lot or for a long time. If you're one of these people, maybe you should seek some help. Not that anyone else can make the decision for you, but sometime knowing someone is there to back you up or to test your ideas gives you the little extra it takes.

If you are going to talk to someone, it's important to choose a person you have confidence in and can trust. If you think you can talk to your parents, this usually is the most ideal situation. Remember, your parents may be initially upset, but the important thing is to be able to tell them and give them a chance to help. It will make it easier if you choose a time and place without distractions and start out by saying something like, 'I have a problem and I need some help.'

If talking to your parents is likely to end up in an argument or a shouting match, then maybe you should try someone else. Other possibilities are an older brother or sister, a favorite relative, a guidance counselor, a special friend, or a family doctor. It may be that you'd feel more comfortable talking to a trained counselor.⁶⁶

TEST YOUR KNOWLEDGE⁶⁷

The following 20 statements will test your knowledge concerning cannabis. Answer true or false.

- ___ 1. THC is largely responsible for the 'high' one gets from marijuana, hashish, and hashish oil.
- ___ 2. Hashish oil usually contains the most THC.
- ___ 3. Marijuana is usually sold in the form of a very fine powder.
- ___ 4. The effects of cannabis are felt for a longer time when it is smoked than when it is eaten.
- ___ 5. Memory is not affected by cannabis.
- ___ 6. People never feel anxious or upset after having taken cannabis.
- ___ 7. Cannabis users are more likely than non-users to have tried other illicit drugs.
- ___ 8. The ability to drive is not affected by cannabis.
- ___ 9. High doses of cannabis can cause people to see things that are not there.
- ___ 10. Normal people never have a bad reaction to cannabis.
- ___ 11. Past experiences with cannabis can affect how a person reacts to this drug.
- ___ 12. The effects of cannabis are the same regardless of whether or not other drugs are taken along with it.
- ___ 13. Cannabis yields less tar than tobacco.
- ___ 14. There is no evidence that cannabis smoking contributes to lung cancer.
- ___ 15. Regular cannabis use can cause people to become nervous and irritable.
- ___ 16. Regular cannabis use may interfere with normal personality development.
- ___ 17. Some regular cannabis users experience a reduced interest in sex.
- ___ 18. It is not possible to become dependent on cannabis.
- ___ 19. There are some young people who have become so dependent on cannabis that they need professional help.
- ___ 20. People can estimate distances just as well after having taken cannabis as they can at other times.

ANSWERS: 1. T; 2. T; 3. F; 4. F; 5. F; 6. F; 7. T; 8. F; 9. T; 10. F; 11. T; 12. F; 13. F; 14. F; 15. T; 16. T; 17. T; 18. F; 19. T; 20. F.

THE UNIVERSITY OF CHICAGO

The effects of an hallucinogenic drug are strongly influenced by the thoughts, environment, and people who are with the user when the drug is taken. Vivid changes in color and form occur. Sometimes the user becomes disoriented--loses sense of time, place, and identity--or has sensation of knowing and feeling what everything in life (and life itself) is all about. Emotions--past, present, and future--fool the user's mind. For some, these experiences seem to be reygaling or enlightening--for others, frightening.

ANGEL DUST, HOG, PeaCe Pill. . .

Phencyclidine (PCP) is a drug used legally in veterinary medicine as an animal tranquilizer and general anesthetic. It is manufactured for illegal street use in both powder and tablet form. It can be swallowed or snorted, but it is usually sprinkled on either parsley or marijuana and smoked like a cigarette.

PCP is a powerful and harmful drug, even in small amounts. It is considered to be one of the most dangerous drugs. Users report that it makes them feel distant and separate from their surroundings. Time seems to pass slowly; body movements slow down. Muscle coordination becomes poor. The user may stagger as if drunk on alcohol. The sensations of touch and pain are dulled. Some users say they feel strong and powerful--like nothing can harm them--after taking PCP. This sometimes leads to serious accidents or acts of violence resulting in tragedy. Many users of PCP have ended up under psychiatric care and in institutions.

People who use PCP over and over again have trouble remembering things and sometimes stutter when they talk. They also can develop serious mental problems. These problems may last from 6 months to a year after a person stops taking PCP.⁶⁹

AFTER TWO YEARS OF STUDYING 'ANGEL DUST'

Emergency room episodes related to use of PCP or 'angel dust' in the New York City area shot up 10 percent in 1981 over 1980. 'This is a serious increase,' says Julio A. Martinez, director of the New York State Division of Substance Abuse, 'and while not as serious as the levels of PCP use three years ago, is still a cause of concern. The increase may mean we're dealing with a new group of users unfamiliar with the drug's serious and predictable effects.'

Martinez reported on a two-year research overview of the effects of PCP, or phencyclidine.

The researchers identified the brain's 'limic system'--which controls such emotive behavior as motivation, rage and aggression--as the site of PCP's action. 'Repeated use of the drug,' it was said, 'causes a high incidence of hyper-excitatory behavior and may possibly produce disturbances or disintegration of some brain functions.'

'It was discovered,' reports the Division, 'that PCP and its metabolites remain in the system for one week or more. Prolonged presence of these substances in the brain tissue is thought to explain PCP's long-lasting effects. The drug is also stored in the body's fatty tissue and may be released into the bloodstream by food deprivation, anxiety, stress or tension. This pattern of storage and release is an important factor in the delayed psychoses, or 'flashback,' experienced by some PCP users.'

In addition to its adverse effect on brain function, the drug adversely affects the reproductive system--researchers found that when pregnant rats were given PCP, only 50 percent of the fetuses survived, and the mothers treated with the drug tended to neglect their young, so that half of these died.

'PCP is especially dangerous for individuals predisposed to mental or emotional disorders, or for pregnant women, but this drug is so dangerous and unpredictable that everyone should avoid it at all costs,' Martinez said.

OTHER HALLUCINOGENS

The natives of Mexico and South America are thought to have used over 40 plants to produce hallucinations. Long before the Spanish conquerors came, many tribes, including the Aztec Indians, were using 'sacred' mushrooms in their religious ceremonies. They called these mushrooms Teonanacatl--the flesh of the gods.

Psilocybin is the principal hallucinogenic drug found in these kinds of mushrooms. Peyote, a cactus, is another hallucinogen that the people of the Americas were using when the early explorers came. Mescaline is the chemical found in peyote which produces its hallucinogenic effects. Today mescaline is most often made illegally from laboratory chemicals.

LSD

"A century of research into the chemistry of ergot alkaloids preceded the first written account of the synthesis of LSD by A. Stoll and A. Hofmann in 1943."⁷²

Ergot is derived from the fungus *Claviceps purpurea*, which parasitizes rye and wheat kernels, and from some varieties of morning glory plants containing lysergic acid, and the precursor of LSD.

During the 1960's, great interest developed in hallucinogens. People became familiar with laboratory-produced hallucinogens, such as LSD. Some people, however, who tried LSD experienced frightening reactions which often occurred long after taking the drug. These drugs faded from popularity when it was feared that LSD might change the body's chromosomes. (Chromosomes determine the characteristics an unborn child will have.) Present research does not suggest that pure LSD causes chromosome damage.⁷³

"LSD is usually sold in the form of tablets, thin squares of gelatin ('window panes'), or impregnated paper ('blotter acid')."⁷⁴

Users became aware that drugs were being mixed (cut) with unknown and often dangerous substances. Today hallucinogens are often sold as other drugs so users cannot be sure of what they are buying.⁷⁵

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"The inhalants cover a wide and strange category of substances which most people do not think of as drugs."⁷⁶

Glues (especially airplane glue), spray paints, aerosols, paint thinners, and gasoline are common household products that are used as inhalants. If the fumes of these products are sniffed and inhaled, they can produce a mind change similar to a hallucinogenic high. An inhalant high usually lasts for a much shorter amount of time--only about an hour.

Because inhalants are cheap and easy to come by, they are abused by children. Luckily, most young people who try an inhalant do not go on to use it regularly. Inhalants are unpleasant to use and can be deadly.

One such inhalant currently being used is Liquid Paper--a dab-on correcting fluid which is easily obtained. A number of deaths have been linked to the inhalation of the product.

Liquid Paper 'contains a solvent, trichloroethane (TCE), used as an anesthetic agent until it was replaced by more effective drugs.

TCE may cause brief euphoria but can lead to death as a result of respiratory failure.

The effects are often irreversible as TCE sensitizes the heart's muscle lining to adrenalin, meaning agents administered to restore heartbeat fail to work. The substance is used in many household cleaning agents and paint thinners.

Gillian Willis, spokeswoman for the BC Drug and Poison Information Centre, did a literature "search in 1981 and turned up reports of 30 deaths from the solvent, also used in products like paint thinners."⁷⁹

EFFECTS

A person who is sniffing an inhalant has trouble keeping his or her balance, has a glassy stare, and finds it hard to talk. The user feels drunk and dream-like. Good judgment becomes clouded. (Some users feel they can fly.) Clowning around under the influence of an inhal-

ant has caused accidental deaths. Other deaths have happened when a user breaths too deeply and inhales enough chemical fumes to pass out. If the person inhales a substance out of a plastic bag, there is danger of death by suffocation.

Heavy use of inhalants over a long period of time has caused severe physical problems. Weight loss, liver and kidney damage, bone marrow changes, and even permanent brain damage have been found in young users.

People have taken steps to prevent inhalant use. The manufacturers of one kind of airplane glue have added a foul-smelling ingredient to their product to discourage sniffing. Local laws prohibit the sale of some inhalants, like glue, to minors.⁸⁰

CURRENT RESEARCH FINDINGS

Researchers at Texas A & A University have been making a study of young people who use inhalants. Here are some findings of that study:

'The results show that the frequency of inhalant use is related to several other problems. Among the Mexican-American youth who were chronic inhalant users, almost all did poorly in school and had unsatisfactory home and social lives. Many also were in trouble with the law. Problems tended to moderate among those who used inhalants less frequently.'

'The study also reveals that inhalers are quick to use other substances such as alcohol or marijuana when they are available, reinforcing the theory that inhalants may be only a cheap and convenient drug of opportunity.'

'Inhalers, it was found, "flock to groups that have similar school, family, and personal problems. . . friends of chronic inhalers are significantly more likely to dislike their teachers, cut classes, and commit acts of vandalism than friends of non-users or experimental inhalers. . . families of inhalers generally showed poorer communication skills and lower levels of academic achievement than the families of non-inhalers.'

'Abstainers as a group scored much higher in orientation toward academic achievement, were involved in sports and social activities, and related well with their parents and friends.'

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"Two new substance-abuse centered ways of life seem to be developing in this country. One revolves around the use of so-called 'look-alike' pills."⁸²

Look-alike drugs, says a report in Adamha News, "are so-called because they mimic prescription stimulants (such as amphetamines) and depressants (such as methaqualone) in size, color, shape or markings. They also produce similar effects: look-alike 'uppers' contain one or more of the nonprescription stimulants caffeine, phenylpropanolamine (PPA), or ephedrine, while look-alike 'downers' use antihistamines to produce tranquilizing effects."

This year, NIDA's Drug Abuse Warning Network has added a 'look-alike' drug category to monitor these drugs--because they have become, says the Adamha News report "a significant drug abuse problem, particularly among young people."

Use has moved up. "From 1979 to 1982, stimulant use measured by NIDA's annual High School Senior Survey rose from 24 percent to 36 percent in lifetime prevalence--and look-alike drugs have been implicated in a significant portion of this increase, perhaps as much as 20 percent. The 1982 survey, the first to distinguish these products from amphetamines, placed lifetime prevalence of look-alike drug use among seniors at 15 percent."

The report notes that "several well-documented reports have linked ingredients in look-alike drugs to severe hypertension with cerebral hemorrhage and death. Caffeine, PPA, and Ephedrine can affect the central nervous and circulatory systems strongly enough to trigger a range of excitable disorders, from insomnia and anxiety to tachycardia (excessively rapid heart beat: Editor)."

"However, these ingredients produce a less marked impact than the amphetamines they mimic; consequently, large quantities of look-alikes are required to produce desired euphoria. At such high dose levels, the cardiovascular system is under considerable stress and may fail in susceptible persons."⁸³

A second category of drugs now showing up among drug problems is the over-the-counter (OTC) stimulant or depressant. These don't try to fool buyers by pretending to be prescription drugs; are marketed as 'pep' pills, diet aids, or sleep aids. "These products contain many of the same ingredients as

the 'look-alikes' in various combinations, although they are not deliberately manufactured to deceive the public," said the NIDA director.

"We believe that both of these categories of products contribute significantly to the national drug abuse problem, particularly by young people," he testified. "Significant numbers of individuals may be using these substances for recreational, 'legal' highs. These drugs can in turn act as stepping stones to other drugs, or contribute to making the drug experience an increasingly important or central part of life."⁸⁴

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ACTIVITY

TRICKY SITUATIONS⁸⁵

TOPIC: Attitudes Toward Drinking

METHOD: Roleplay

OBJECTIVE: Explore and clarify attitudes toward drinking and distinguish between responsible and irresponsible behavior in certain drinking situations.

DESCRIPTION OF ACTIVITY:

1. Divide into groups of three for each character in the roleplay. The groups will each think about how their character will behave, what s/he might say or do, etc. Then choose one person in each group to play the role.
2. Discussion follows each roleplay. Look at the following discussion questions before beginning the roleplay.
 - a) How does each character feel?
 - b) What does each character's role say?
 - c) Who made strong arguments?
 - d) What else might have been said?

Roleplay 1: IN THE LOCKER ROOM

The situation: The basketball team has just beaten the best team in the league to end a successful season. The coach isn't around, and one of the players brings out two bottle of champagne and calls for a celebration.

Rick: You brought the champagne. You're graduating and so you have a lot to celebrate: this is your last game for the school. There will probably be a quiet dinner for the team in a week or so, but you feel like celebrating now. The team deserves it! You don't want anyone to get drunk, and you know no on will with two bottles of champagne to divide eight ways. You're a responsible drinker.

Joe: You want to get blasted! You think the champagne is fine but after it's killed you want everyone to go out to do some serious drinking.

Ted: You like to drink sometimes, and you always know your limit. But you think the coach wouldn't like it if he knew this was going on. It's against the rules, and you think that's reason enough not to drink the champagne. If they open the bottle, you won't have any, and you're afraid that will make you feel like you're outside of the celebration.

*Some of the following activities have been slightly modified.

Lou: You don't understand what the big deal is about. Rules prohibiting booze in the locker room weren't made to apply to situations like this, where the team obviously has earned the right to a small, private celebration. And anyway, what's a glass of champagne going to do? This won't be any drunken bash, after all; just a special moment for everyone, made a little more special by the champagne. You're a responsible drinker.

Roleplay 2: GOING OUT WITH FRIENDS

The situation: Denise is 17 but looks older. She is getting ready to go out with her friends. They are going clubbing; there are a couple of places they know they can get into with no trouble. Denise's father sees her getting made up and asks her where she is going.

Denise: You and your friends drink responsibly and do not get drunk. You drink just enough to relax, get into the music, and have a good time. Besides, they make you order something at these clubs and you like the way the sweet mixed drinks taste. You and your friends take the subway to the clubs you go to, and if it's late, a cab coming home. You don't want to lie to your father about where you're going, but you know he won't like the truth. "

Father: You think Denise is not old enough to be drinking. That's why it's illegal; and really, they should have left the legal age at 21. And even when she's 21, it doesn't look right for a girl to be drinking in bars. You've never been to the bars she is going to, but you can imagine what it's like; you know how you acted when you were a kid. Denise has always been a good kid, but who knows what to make of teenagers from one day to the next?



ACTIVITY

WHEN IS A PROBLEM A PROBLEM?⁸⁶

TOPIC: Information About Alcoholism

METHOD: Group Discussion/
Roleplay

DESCRIPTION OF ACTIVITY:

Students:

1. brainstorm all of the hints or warning signs they think might point to alcoholism in adults. Which are most common? What might you do if you see them?
2. discuss which warning signs might also apply to youthful problem drinkers. Is there any difference between a youthful problem drinker and an alcoholic?
3. compare their signs and review "20 Questions" that may indicate a drinking problem for a young person. Class may decide to add or drop items from the list. This discussion should lead to actual case situations (without mentioning names of course) and possibly tactics of confrontation i.e., when to talk to a friend (obviously not when he or she is drunk, better the day after an incident); who, where, how (not to be judgmental, but concerned); are you going to lose the friendship? is it your business?
4. roleplay talking to a friend who is having problems with drinking. (In small groups or volunteers).

WHAT DO YOU THINK?⁸⁷

Is it a problem? Would you worry if a FRIEND. . .

1. Lost time from school due to his or her drinking?
2. Drank because he or she was shy with other people?
3. Drank to build up self-confidence?
4. Drank alone?
5. Drank and it affected his or her reputation?
6. Drank to escape from study or home worries?
7. Felt guilty or bummed out after drinking?
8. Was bothered if someone said that maybe he or she drank too much?
9. Had to take a drink when he or she went out on a date?
10. Got along better with other people when he or she was drinking?
11. Got into financial troubles over buying liquor?
12. Felt a sense of power when he or she was drinking?
13. Started losing friends since he or she had been drinking a lot?
14. Started hanging out with a crowd where stuff was easy to get?
15. Had friends who drank LESS than he or she did?
16. Drank until the bottle was done?
17. Had ever had a complete loss of memory from drinking?
18. Had ever been to a hospital or been busted due to drunk driving?
19. Turned off to any studies or lectures about drinking?
20. Thought she or he might have a problem with liquor?

WHAT WOULD YOU SAY?

WHAT WOULD YOU DO?

WHAT ARE FRIENDS FOR?

ACTIVITY

BILL, RICHIE, MARTHA⁸⁸

TOPIC: Information About Alcoholism

METHOD: Written story
reactions/
Discussion

DESCRIPTION OF ACTIVITY:

1. Describe three individuals (two involve alcoholism or problem drinking, one excessive drinking).
 2. In small groups or in large group, compare and discuss the responses.
 3. Definition of alcoholism should be elicited as summary.
-
1. Bill is 19. He graduated from high school last year. Now he's working off and on as a roofer with his older brother, Tom. He moved in with his brother and sister-in-law because life at his parents was too much to take. Bill didn't like high school much but liked the partying, sports and drinking most of all. Now he feels out of touch with a lot of people. He still has a group that goes to the bars at night, but most of them are settling down. Bill spends most of his time in the bar these days especially when there isn't any work. He is engaged to Jane. Jane is confident that once they are married, Bill will cut down. Tom and he have a few beers in the morning, but they never had any problems with jobs, except for once when Bill got stopped for drunken driving while on lunch break.
 1. Do you think Bill has a drinking problem?
 2. Is Bill an alcoholic?
What makes you think so?
 3. What if Bill just drank beer or cut down?
 4. If you were a friend, what would you say to Bill?
 2. Richie is going into his senior year of high school in the fall. He got decent marks through most of his junior year, passed everything, even played on the football team. When the spring came he started to goof off a little; instead of just getting loaded on weekends, he started to stay out with his friends a couple of weeknights and would have eight or nine beers a night. Now it's summer, and Richie has a part-time job which he likes and does well. In fact, the boss is even talking about keeping him on part-time during the year.

Richie drinks heavily, at least seven or eight beers, almost every night; and on weekends he has a few at the beach or on the corner during the day. Once in a while he overdoes it and gets a little rowdy; but nothing has ever come of it. His mother is not happy about his drinking, but she doesn't say much about it because she figures it's probably a stage.

1. Do you think Richie has a drinking problem? Why or why not?
 2. What, in the description of Richie, would you feel needs to be added or changed to make you change your mind?
 3. If you were Richie's friend, what, if anything, would you say or do about his drinking?
 4. Is there more information you need to have about Richie's drinking to know if he's in trouble or not?
3. When Martha's father comes home from work he always has several drinks. As soon as he starts, her mother starts getting upset and yells at him. Sometimes he yells back but sometimes he just sits there looking unhappy and keeps drinking. Martha thinks her mother is mean and hard to live with. She thinks if her mother stops yelling, that her father will stop drinking. It has gotten to the point that Martha never brings home friends and stays home as little as possible. Martha is 16 and does O.K. in school but often thinks of getting away somehow.
1. How does each person in the story feel?
 2. Which person would you least like to be? Why?
 3. What are 3 things that Martha could do? What might happen if she did each?
 4. What would you say or suggest if you were a friend of the family?

ACTIVITY

WHAT WOULD YOU DO?⁸⁹

1. Your older brother, who smokes pot frequently, arrives at the school dance to drive you and your friends home. It is obvious that he is stoned when he drives the car right up on the sidewalk in front of the school. This time he is showing off to a buddy of his and he orders you to hurry and get in. You wonder what to do since your parents are attending a party and your friends' parents are also gone for the evening. What could you do? What would you do? Why?
2. One of your friends has started using drugs (not for medical reasons). He usually combines uppers and downers. You don't think that he should be using pills and want him to stop. It is affecting his grades and he is getting in trouble in some of his classes. What could you do? What would you do? Why?
3. You are a member of your school's basketball team and recognize the value of body conditioning for sports. Therefore, you do not smoke or drink. A party has been planned by many of your friends and you want to be a part of the group. You hesitate to accept the invitation to attend the party since you know what you will be asked to smoke. Pot. What could you do? What would you do? Why?
4. There is a serious drug problem at your school. In the hall during lunch you see some students selling drugs to other students. Some students even use drugs during school when the teachers aren't around. You know who the biggest drug pushers are and don't approve of what they are doing. What could you do? What would you do? Why?

ACTIVITY

HOW DO YOU FEEL ABOUT:⁹⁰

1. Your sister or brother selling marijuana to grade school kids.
2. Asking someone to buy beer for you for a party?
3. Seeing your teacher and his/her family drinking beer and eating pizza at a pizza parlor?
4. A star school athlete who uses speed?
5. Your date who does not drink alcoholic beverages at a party?
6. Your brother who brags about how much pot he can smoke?
7. Someone who thinks smoking pot is the only way to have a good time?
8. A girlfriend/boyfriend who refuses to go home from a party with you because you're high?

ACTIVITY

ROLE PROFILES⁹¹Situation: Ann

You have gone to the movies on this Saturday afternoon with three friends, Carol, Joyce, and Cheryl. On the way home you run into Cheryl's older brother who has some dope in his car. He gives Cheryl two joints and tells you all to "have a blast--it's about time you found out what life's all about." Your friends think this is a great chance, and you all go off to the park behind the bushes. You don't want to smoke, but your friends are starting to light up. What do you do now?

Situation: Friends--3 (Joyce, Cheryl, Carol)

You have gone to the movies on this Saturday afternoon with three friends. On the way home you run into Cheryl's older brother who has some dope in his car. He gives Cheryl two joints and tells you all to "have a blast--it's about time you found out what life's all about." You think this is a great idea, but Ann doesn't think so. In fact, now you're all in the park smoking and she hasn't taken one toke. You don't want her to miss the fun or spoil it for the rest of you. How will you try to persuade her to smoke?

ACTIVITY

A PERSON SHOULD AVOID INHALING
THE FUMES OF A VOLATILE SUBSTANCE⁹²

1. Develop a working definition of the terms volatile and solvent.
2. Develop a list of volatile substances found in the home. Discuss each product. Identify them as harmful or nonharmful.
3. Make a drawing of the respiratory system, identifying the mouth, throat, voice box, windpipe, bronchi, lungs and diaphragm.
4. Discuss the interrelationship between various parts of the body--lungs, heart, liver, kidneys, brain, stomach.
5. Collect empty cans and bottles of household solvents. Note poison symbols and precautions.
6. Discuss the effects and dangers of inhaling gasoline, carbon monoxide and natural gas.

ACTIVITY

INDIVIDUALS MAY BE AFFECTED BY DRUGS IN DIFFERENT WAYS, AND ONE PERSON MAY BE AFFECTED DIFFERENTLY BY THE SAME DRUG AT DIFFERENT TIMES

1. List the patent medicines (non-prescription drugs/OCT) that are available for headache, constipation, coughs, tension, anxiety, insomnia, stomach acidity, halitosis, overweight, underweight, backache, hemorrhoids, allergy, acne, dandruff, sluggishness, etc. Examine labels for possible side effects and record information.

2. Discuss: Do these preparations treat symptoms of disorders?

Are there dangers in self-diagnosis and self-mediations?

With so many products purporting to do the same thing, how does one know which is best?

Should one be alert to possible side effects? Why?

Is the word 'cure' or 'treat' used in the labeling? Explain the difference in the expected results.

Is there danger in regular or frequent use of any preparation? Explain.

3. Discuss the dangers of mixing drugs. How does 'potentiation' occur (consider alcohol and barbiturates)?

ACTIVITY

ALL DRUGS ARE POTENTIALLY DANGEROUS⁹⁴

Debate:

- 1) All drugs are dangerous.
- 2) We live in a drug-oriented society.
1. Prepare a question box so that students can submit unsigned questions about drugs or drug abuse.
2. Provide a "Meet the Press" situation in which a selected student acts as an "expert" and is interviewed by a student panel of "reporters" concerning dangerous drug abuse. Allow time for the questions from other class members.
3. Using resource materials, supplementary materials and the textbook, investigate the dangers associated with the various types of drugs: OTC, look-alikes, narcotics, stimulants, depressants, hallucinogens, antibiotics, and tobacco. Compare the values and dangers of each in terms of the following functions and disorders:
 - physical fitness
 - hepatitis and other liver disorders
 - respiratory disease
 - emotional difficulties

ACTIVITY

DRUG ABUSE IS A SYMPTOM OF AN INDIVIDUAL'S PERSONAL PROBLEMS⁹⁵

1. Students conduct a survey among their family and friends to find the drugs most commonly used and the reasons for their use.
2. Students conduct a survey among their peers to find the most commonly abused drug and any pattern of abuse.
3. Students list and discuss the risks involved in drug abuse.
4. Discuss: What is peer pressure? How does it work? What is its influence? To what extent does peer pressure have influence among persons experimenting with drugs?
5. List and discuss some reasons for drug abuse. Identify the short-term and long-term solutions to problems. Do any of the reasons listed address themselves to solving problems? Explain. What coping behaviors might be more valuable or more successful? Discuss the social situations in which marijuana is smoked. How does this kind of atmosphere encourage further experimentation with perhaps more dangerous drugs?
6. Analyze and discuss the lyrics of popular songs that refer to drugs.
 What do they say about drugs?
 Do the lyrics have an effect of encouraging or discouraging drug experimentation?
 Do the lyrics help establish an atmosphere of acceptance for drug abuse?
 Do their album covers have a drug message? Explain.
7. Do public statements such as radio and TV ads on drugs by well-known recording stars and disc jockey's influence young people? Explain.
8. Roleplay:
 A teen-age girl speaks to her 11-year-old sister who has been experimenting with marijuana.

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GLOSSARY⁹⁶

Addict: A person who is physically dependent on a drug.

Addiction: Physiological and/or psychological dependence on a drug. The overpowering physical or emotional urge to do something repeatedly that an individual cannot control, accompanied by a tolerance for the drug and withdrawal symptoms if the drug use is stopped.

Alcohol: (Ethyl) The intoxicating chemical (C_2H_5OH) found in liquors and produced by the action of yeast on sugars and starches. Often referred to as 'beverage alcohol' as opposed to methyl alcohol which is not consumable and is primarily used for industrial purposes. Alcohol is classified as a central nervous system (CNS) depressant.

Alcoholic: The term 'alcoholic' has been variously defined at different times and by different people. However, three aspects of the alcoholic have generally been agreed upon:

1. The alcoholic's drinking pattern is incompatible with what is expected by the other members of society.
2. Alcoholics have an urge to drink or to continue drinking once they start that they cannot control.
3. An alcoholic's drinking creates either social, economic or health problems for themselves, their family, and/or society.

Analgesic: Pain-reliever; pain killer.

Anesthetics: A drug which produces anesthesia characterized by loss of sensation to touch and pain and loss of consciousness.

Antibiotic: A substance, usually of microbial origin, that reduces growth of bacteria or kills bacteria.

Barbiturate: A chemical derivative of barbituric acid that will produce a calming effect as well as sleep. This group of drugs is potentially hazardous in that they are capable of producing mental dependence, physical dependence, and overdose with prolonged or frequent use.

Bender: (slang) A period of continuous intake of alcohol with the intent of getting drunk.

Blackout: A period of temporary amnesia which occurs while the person is drinking. During a blackout, the person is conscious and walks, talks, and acts but can't remember any of the events the next day.

Blood Alcohol Content (BAC) (or Blood Alcohol Level): The percentage of alcohol in the blood stream at any given time.

Caffeine: A mild stimulant drug found in coffee, tea, cola drinks, and chocolate.

Central Nervous System: The system which controls and coordinates the other systems of the human body.

Cirrhosis: The replacement of liver tissue with scar tissue due either to malnutrition and/or excessive and prolonged alcohol use.

Cocaine: A stimulant alkaloidal drug that comes as a white powder when pure.

Codeine: A mild opiate alkaloid made from morphine, used in cough syrup and analgesics.

Cold Turkey: (slang) Abrupt withdrawal from a dependent drug(s).

Controlled Substances: Controlled Substances are those placed on a schedule or in special categories to prevent, curtail, or limit their distribution and manufacture. Under the Controlled Substances Act of 1970, the Attorney General of the United States (on the recommendation of the Secretary of Health, Education and Welfare) has the authority to place drugs into five schedules or categories, based on their relative potential for abuse, scientific evidence of the drug's pharmacological effect, the state of current scientific knowledge about the drug, and its history and current pattern of abuse.

Delirium Tremens ('D.T.'s): A serious and sometimes fatal condition some alcoholics develop when they suddenly stop drinking, much like the withdrawal symptoms of other drug addicts. Symptoms can include hallucinations ('delirium'), uncontrollable shaking ('tremens'), terror, and agitation, and fever.

Dependence: Dependence is a state of periodic or chronic intoxication detrimental to the individual and to society, produced by the repeated consumption of a natural or synthetic drug. It consists of: (a) an overpowering desire to continue using the drug, (b) a tendency to increase the dose or the frequency of consumption, and (c) a psychological, and sometimes physical dependence on the drug's effects.

Depressant: Depressants are drugs which may reduce anxiety and excitement. They basically act to depress the activity of the central nervous system. Taken in small doses, they temporarily ease tension in some people and induce sleep. Barbiturates, tranquilizers, and alcohol make up the largest groups of depressant drugs.

Dosage: The exact amount of a drug recommended by the physician to be consumed by a patient; usually accompanied by precise instructions. Including the exact times, amount, method or ingestion, and frequency of use.

Drug: Is any substance that when ingested, changes the functioning of the body or mind of the human organism. Basically, a drug is used to treat illness, to protect against disease, to alter moods and behavior, to promote better health. Drugs are not only controlled substances (such as heroin) but socially accepted drugs (such as tobacco and coffee) over-the-counter medications, and prescription drugs.

Drug Abuse: Use of a drug substance to the detriment of either the user or society.

Drug Misuse: Use of a drug substance contrary to the instructions of the supplier, the dispenser, or the prescriber.

Drug Use: Deliberate exposure to a drug substance, generally in a continuing and non-experimental manner.

Hallucination: Is a false sensory perception.

Hallucinogens: Drugs that cause hallucinations.

Hangover: The unpleasant physical sensations experienced after the effects of excessive drinking wear off. Symptoms can include nausea, headache, thirst, and fatigue. No effective cure is known.

Hashish (or 'hash'): Is a dark brown resin from the flowering tops of cannabis sativa. It is much stronger than crude marijuana since it contains more of THC. 'Hash oil' is a distillate of the marijuana plant with a concentration of THC of forty-eight percent or even higher. The effect on the user is more intense and the possibility of side effects is greater.

High: (slang) A pleasurable, continuing state of intoxication, characterized by euphoria.

Illicit (drugs): Drugs whose uses are illegal. Examples are narcotics, marijuana, and psychedelics.

Intoxication: The physical and emotional effects of excessive drinking.

Lethal Dosage: The amount of a substance required to produce death of an organism.

Licit (drugs): Drugs whose uses are permitted; legal. Examples are over-the-counter medications, prescription drugs, alcohol and tobacco, except where minors are involved.

Kegger: (slang) A party held primarily for the purpose of drinking beer. Beer is usually supplied in the form of kegs. Most common with junior high, senior high and college groups.

Marijuana: Marijuana is a common plant with the botanical name of cannabis sativa. The active (mind-affecting) ingredient is delta-9-tetrahydrocannabinol, or THC.

Mescaline: An alkaloidal hallucinogen extracted from the peyote cactus.

Morphine: A narcotic extracted from opium. It is used legally to kill pain. It is used illegally, too.

Narcotic: Narcotics are drugs that relieve pain and often induce sleep. The opiates, which are narcotics, include opium and drugs derived from opium, such as morphine, codeine, and heroin. Narcotics also include certain synthetic chemicals that have a morphine-like action, such as methadone.

Nicotine: The mild stimulant drug found in tobacco.

Opiates: Narcotics made from the opium poppy.

Opium: The dried juice of the opium poppy.

Overdose (O.D.): An 'overdose' of drugs is the amount of drugs taken which causes an acute reaction to the user. A drug overdose can often be recognized even by a non-medical observer because it often produces stupor or coma. Often there is a low breathing rate as well. Medical help is needed immediately. First aid measures that can be taken while waiting for medical help include artificial respiration to restore breathing.

Paregoric: A diarrhea remedy or antispasmodic that contains opium.

Peer Pressure: Is social urging to behave in a way that is acceptable among people in one's own general age group. Peer pressure involved the need to be accepted, the need

to have friends, and the need to check out our feelings and values with others.

Physical Dependence: Addiction of a drug. It has two parts:

(1) the user has very painful withdrawal sickness when he quits using the drugs. (2) the body gets used to the drug. So it takes more and more of the drug to get the effect the user wants.

Potency: The degree of strength or power; usually refers to the relatively small amount which can produce desired or expected effects.

Prescription Drugs: Those drugs, medications, and medical devices subject to regulations by a physician's prescription which are 'habit forming', 'toxic', 'potentially harmful', or whose 'method of use', are not safe except under the supervision of a physician.

Prohibition: The period in American history from 1919 to 1933 when it was illegal nationwide to manufacture, transport or sell alcoholic beverages.

Psilocybin: A hallucinogen found in a kind of psychoactive mushroom, also called magic mushrooms.

Psychedelic: Mind-manifesting; consciousness-expanding; introducing new, strange, or dramatically altered perceptions, sensory experiences, illusions, visions and subconscious materials into the conscious mind, thus 'expanding' it in ways that are beyond the capacity of ordinary experience.

Psychological Dependence: Psychological dependence refers to an emotional need to use periodically or chronically a drug to obtain pleasure or to avoid discomfort. The individual believes he is unable to get along in life without the agent. There is frequently the belief that the agent is an integral part of life. When the drug is unavailable, the user may feel ill at ease, anxious or irritable. At the same time, the individual may or may not be physically dependent on the drug.

Sedative: Tending to calm, moderate or tranquilize nervousness or excitement.

Self-Concept: An evaluation of your own worth based on your perceptions and feelings of how you compare to others.

Shooting: (slang) To inject a drug intravenously with a needle; also, called mainlining.

Snorting: (slang) Inhaling heroin or cocaine through the mucous membranes of the nose.

Stimulant: Stimulants are drugs which increase alertness and activity. They include caffeine, cocaine, and amphetamines. Stimulants are often called 'uppers' or 'pep pills.'

Stoned: (slang) Pleasurable stupor or intoxication from a drug(s); characterized by elation and euphoria.

Substance: Means all chemicals such as alcohol, spirits, wine, beer, controlled substances, prescription drugs, over-the-counter products, inhalants, and substances other than food used to affect the structure or any function of the body.

Temperance: Literally, use of alcohol in moderation. Historically, as in the Temperance Movement, either use of alcohol in moderation or total abstinence.

Toxic: Affected by a toxin or poison; poisonous.

Tranquilizer: A drug used to reduce anxiety and tension. A drug that brings tranquility by calming, soothing, quieting or pacifying without depressing patients.

Volatile Substance: Substances like model airplane glue, paint thinner, gasoline, and other volatile (breathable) solvents contain a variety of chemicals which can cause tissue damage or death when inhaled or ingested. Also can be referred to as inhalants.

Withdrawal: After developing physical dependence on a drug, this is the result of discontinuing its intake. With alcohol this causes various reactions from mild disorientation, hallucinations, shaking, and convulsions to 'delirium tremens' ('D.T.'s').

SLANG TERMS FOR DRUGS⁹⁶Amphetamines

Beans, Bennies, Black Beauties,
Black Mollies, Copilots, Crank,
Crossroads, Crystals, Double
Cross, Meth, Minibennies, Pep
Pills, Speed, Rosas, Roses, Uppers,
Thrustes, Truck Drivers, Whites,
Wake-ups

Barbiturates

Barbs, Blackbusters, Bluebirds,
Blue Devils, Blues, Christmas
Trees, Downers, Green Dragons,
Mexican Reds, Nebbies, Nimbies,
Pajaro Rojo, Pink Ladies, Pinks,
Rainbows, Red and Blues, Reds,
Redbirds, Red Devils, Sleeping
Pills, Stumblers, Yellow Jackets,
Yellows

Cocaine

Blow, C, Coca, Coke, Flake, Girl,
Heaven Dust, Lady, Mujer, Nose
Candy, Paradise, Perico, Polvo
Blanco, Rock, Snow, White

Hashish

Goma de Mota, Hash, Soles

Heroin

Big H, Boy, Brown, Brown Sugar,
Caballo, Chiva, Crap, Estuffa,
H, Heroína, Hombre, Horse, Junk,
Mexican Mud, Polvo, Scag, Smack,
Stuff, Thing

LSD

Acid, Blotter Acid, California
Sunshine, Haze, Microdots, Paper
Acid, Purple Haze, Sunshine,
Wedges, Window Panes

Marijuana

Acapulco Gold, Cannabis, J,
Colombian, Ganga, Grass, Hemp,
Griffa, Herb, Jay, Joint, Mota,
Mary Jane, Mutah, Panama Red,
Pot, Reefer, Sativa, Smoke, Tea,
Stick, Weed, Yerba

Peyote

Buttons, Cactus, Mesc, Mescal,
Mescal Buttons

Methaqualone

Qualude, Quads, Quas, Soapers,
Sopes, Sonor

Morphine

Cube, First Line, Goma, Morf,
Morina, Morpho, Morphy, Mud

Phencyclidine

Angel Dust, Crystal, Cyclone,
Hog, PCP, Peace Pill, Rocket
Fuel, Supergrass, TIC TAC

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CHAPTER IV
CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

Two principal conclusions have been drawn from the experience of having compiled drug information for the supplementary materials.

1. Although searching for and then selecting the most relevant drug information was time consuming, it was also rewarding.

2. After reading about the various drug education programs, it was interesting to note that one particular program would not be effective for every school. However, each program contained similar aspects. For instance, most of the programs used some form of counseling whether it be individual or group. Also, the counselor was usually on staff, but sometimes employed from outside the educational field.

RECOMMENDATIONS

After the supplementary materials have been used for a year, the first two recommendations should be followed to retain the effectiveness of the information. The remaining recommendations would be more beneficial if they could be implemented some time during the coming or the next school year.

1. Each year the supplementary materials should be evaluated for effectiveness. This could be done by means of tests on the materials, questions asked by students pertaining to the materials and the frequency of drug abuse incidents in the school.

2. The materials should be up-dated each year in order to add new information or replace new information with that which has become outdated.

3. Teacher in-service workshops should be held in order to learn about the latest drug trends, new drugs on the market and counseling techniques. These are very important aspects to beginning and maintaining a successful drug education program.

4. Drug education should be integrated into other areas of education not be dealt with solely by the health teacher. Other teachers could deal with student values clarification, communication skills, developing self-esteem and/or nutrition.

5. Outside sources should be implemented into the program. For example, a lawyer, police officer, nurse or a drug counselor (to name a few) could add further insight into the drug problem.